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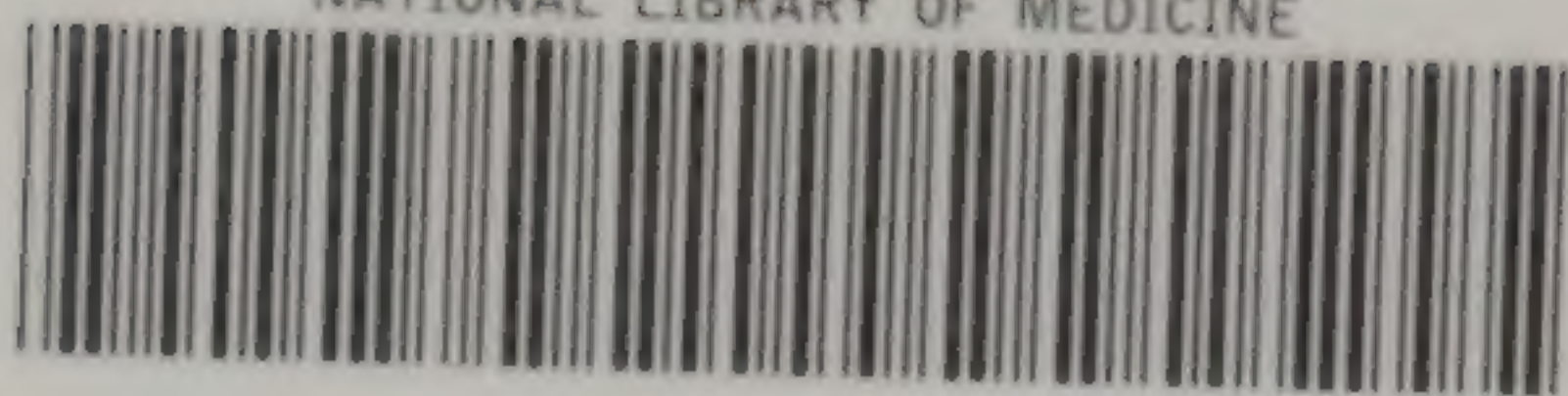
AND

FEMALE DISEASES.

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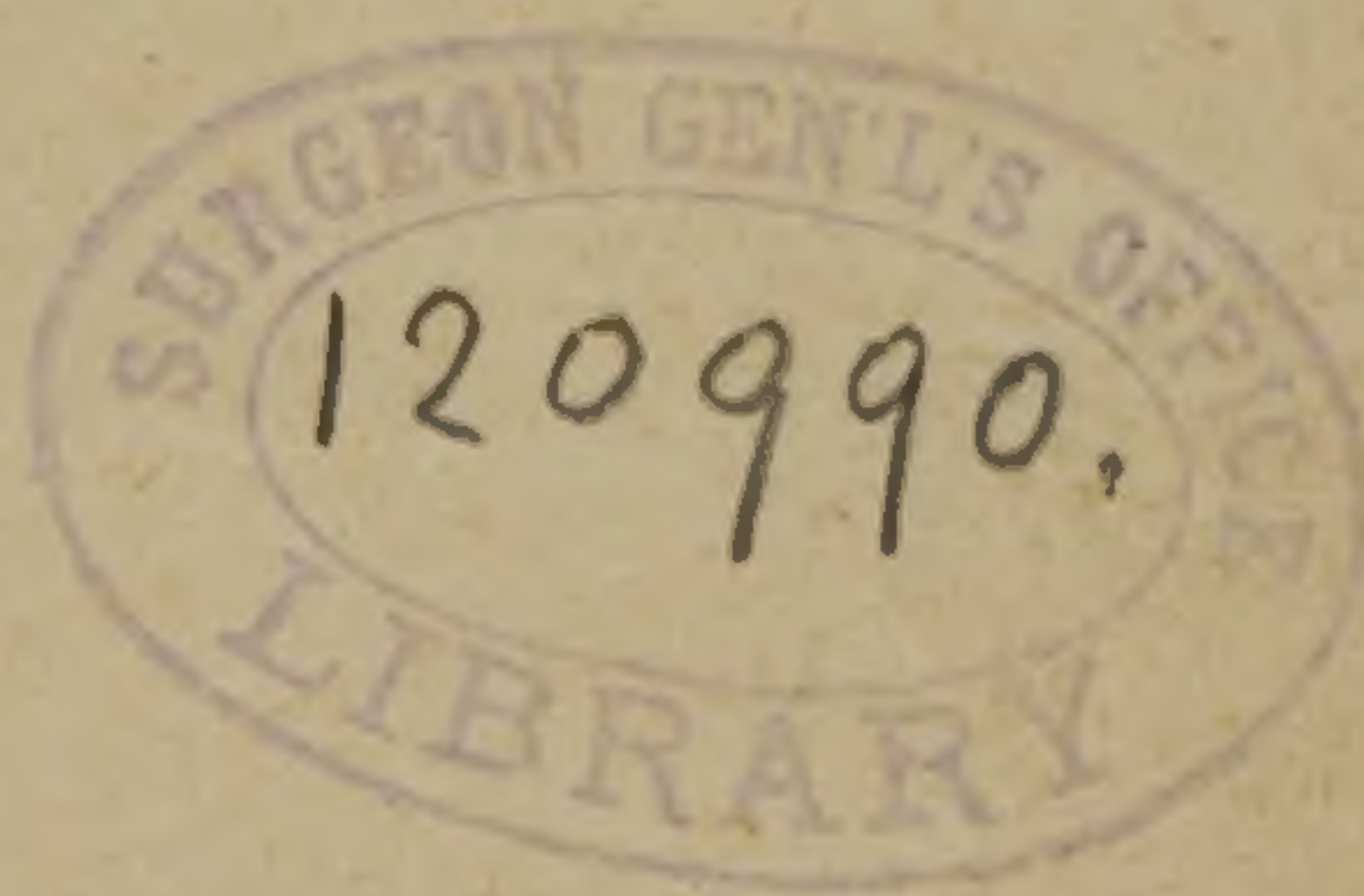
AND

FEMALE DISEASES.

BY

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Member of the Lancaster City and County Medical Society.



LANCASTER, PA.:
THE LANCASTER PUBLISHING CO.
1884.

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1884

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P R E F A C E.

IN the following pages I have attempted to discuss the hygiene and diseases of the female reproductive organs, in the simplest possible language, for the instruction of the laity.

The importance of the subject will, I think, be disputed by none; and whether I have succeeded in producing a work that will have the desired effect remains to be decided by those of the gentler sex who may read it, and the critics who consider it worthy of review.

LANCASTER, PA., Jan. 1, 1884.

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FEMALE HYGIENE

AND

FEMALE DISEASES.

FEMALE HYGIENE.

CHAPTER I.

INTRODUCTION.

WHEN we consider that about one-half of the members of the entire human family are of the female sex ; that upon these devolves the paramount and serious work of perpetuating the human species ; that a healthy offspring can be produced only by healthy parents,—I say, when we consider all these self-evident facts, it is very easily seen that female health is an essential matter for the welfare of the world at large, and thus we see the importance of FEMALE HYGIENE.

When we go just one step farther, and find that of all American women, between the ages of fifteen and forty-five years (that is, the period of sexual activity), fully *one-fifth* suffer from some form or other of the class of diseases peculiar to their sex, we find that not only should female hygiene receive attention, but that a study of the DISEASES themselves, and of their general treatment, is of great importance.

Female diseases and female hygiene are subjects that must be studied together ; we cannot thoroughly understand one without knowing something of the other. I decided, therefore, to treat of both in the same work.

I have just now said that fully one-fifth of all American women suffer more or less from some form or other of uterine disease. This statement will no doubt be considered

by many to be the expression of an erroneous opinion, or else a wilful exaggeration by one desirous of magnifying the importance of the subject he discusses. I candidly believe, however, that it is a fact.

I am well aware that in many foreign countries these diseases are not near so frequent as with us. When a student I devoted considerable attention to this subject, and while studying these diseases in Vienna and some other European cities I was strongly impressed with the fact that the women there are far more exempt from womb diseases than our American women. The reasons for this are clear enough: their habits of life are more simple than ours, their diet plain and wholesome, while a more healthy climate renders them much less liable to catarrhs of the various mucous membranes of the body; all matters which tend to produce a healthy system, which is not near as likely to take on disease as those of the great majority of the American women. It must be remembered that a person whose system is delicate will take disease much more readily than one of robust health.

Our grandmothers all concur in saying that in former years women were far more robust, and womb diseases much less common, than now. This is no doubt true, in the main; but we must also remember that in those days uterine diseases did not receive the same attention as they do to-day.

The term "womb disease" is a general one, and is calculated to produce an erroneous impression in the minds of many, leading them to believe that it refers to one particular disease of the womb, while in reality this organ is subject to quite a number of very different diseases, just like any other organ of the body. It may be congested, inflamed, enlarged; it may be prolapsed, or otherwise displaced; it may contain a tumor, cancerous or simple; in short, it is subject to more diseases than almost any other organ of the body.

But we must also remember that the other organs of the sexual system are also frequently affected by disease, either by themselves, or, what is more commonly the case, in connection with diseases of the womb.

The ovaries, for example, are more or less affected in almost every case of disease of the womb. The vagina, too, is not seldom diseased. Besides this we very frequently find the connective tissue of the pelvis, as well as the peritoneum (the smooth membrane that covers the uterus, ovaries, etc.), inflamed and covered or infiltrated by inflammatory products.

The diseases of women usually occur during the period of sexual activity — the child-bearing period. Before puberty they are rare, and the same may be said, with some few exceptions, of the period following the change of life.

The reproductive organs of woman are greatly predisposed to disease during the child-bearing period. Every month the pelvic organs are in a state of congestion for a period of from five to eight days. I mean during the menstrual period. During pregnancy the uterus undergoes a remarkable change, developing to a size sufficient to contain a child, while in the unimpregnated condition it measures but three inches. After labor involution takes place, and it again returns almost to its previous size. This process of involution is a very important one, and we shall frequently have to refer to it throughout this work. If involution is from any cause retarded, we are almost certain to have some form of uterine disease as a result. These changes render the uterus and its appendages very prone to disease.

A woman's life may be divided into three tolerably distinct periods, each of which has its peculiarities, its liabilities to special diseases, its pleasures, and its pains.

The first period is the period of childhood, extending from birth to about the fifteenth year, — the age of puberty. By the period of puberty we mean the time when the sex-

ual organs develop, girlhood is transformed into womanhood, and menstruation appears. During the period of childhood the sexual organs remain dormant, and are therefore very seldom affected by disease.

The second period of a woman's life is the period of sexual activity. It is the period during which menstruation occurs, commencing with the period of puberty, about the fifteenth year, and ending with the menopause, "the change of life," which usually occurs at the forty-fifth or forty-eighth year. This is the only period during which a woman is capable of bearing children, since previous to it the organs are not developed, and after it ovulation ceases, and the ovaries, uterus, and vagina become atrophied.

This being the period during which the sexual organs are most active, in fact, the only period during which they really perform any function, is likewise the period during which they are particularly prone to disease. In fact, the majority of the diseases of the womb date, as I said before, from child-bearing, and are due to some accident or carelessness during or soon after labor.

The third period begins when menstruation ceases, and ends only when death closes the scene. It is, or, at least, should be, a period of comparative repose. The reproductive organs have done their work, and the mother now remains only to watch—usually with pleasure, but, alas! too often with pain—the career of her offspring.

This period, although not one of sexual activity, is, nevertheless, one in which some diseases are particularly liable to attack the sexual organs. The most prominent of these is cancer.

CHAPTER II.

ANATOMICAL REMARKS.

IN order to form a clear idea of the diseases of an organ, it is necessary, in the first place, to know something concerning its anatomy and physiology. I shall, therefore, give a short description of the female sexual organs, their structure, size, situation, and the relation they bear to each other.

A few illustrations would greatly assist me in giving my readers an idea of these organs, but I am, for obvious reasons, compelled to avoid all plates in a book of this nature.

The organs of reproduction of the human female are situated in the pelvic cavity, where, being surrounded by a bony wall on all sides, they are remarkably well protected from all external injuries.

They consist of the uterus, ovaries, Fallopian tubes, and vagina.

THE UTERUS.

The *uterus* (womb) is situated between the bladder in front, and the lower bowel (rectum) behind. It is a pear-shaped organ, flattened on its anterior and posterior surfaces, about three inches in length, and an inch and a half broad at its upper end, while its lower end is round, and less than an inch in diameter. The upper half, called the "body," is somewhat triangular, while the lower half, called "the neck" or "cervix," is the same thickness throughout. The lower end of the neck dips into the vagina about two-thirds of an inch. At the centre of this there is an opening,

called “the mouth of the womb” (external os), being the beginning of a canal, — the cervical canal, which leads to the cavity of the body, — a triangular cavity, each of the sides of which measures about an inch. The cavity of the womb is very small, its anterior and posterior surfaces being almost in apposition. The cervical canal is spindle-shaped, being largest in the middle and narrower below, at the external mouth, and above, at the internal mouth, where it is continuous with the cavity of the body of the uterus.

The womb is composed chiefly of involuntary¹ muscular fibres, with some connective tissue, blood-vessels, and nerves. It is extremely vascular, its vessels being both large and numerous.

As said before, the lower end of the neck dips into the vagina, so that at a point about two-thirds of an inch above its extremity, the upper end of the vagina is attached to its entire circumference. The greater part of the external surface of the uterus is covered with the same smooth serous membrane² that covers the other organs in the pelvis and abdomen — the peritoneum.

The cavity of the uterus, the cervical canal, and the outer surface of that part of the neck which dips into the vagina, are all covered with a mucous membrane,³ which is continuous above with that of the Fallopian tubes, and below with that of the vagina.

This description is, of course, that of a healthy, unimpregnated uterus. In disease it often becomes much enlarged, while sometimes it diminishes in size. During menstruation it becomes congested, and, consequently, larger; and during pregnancy it attains a weight of a pound and a half,

¹ *Involuntary muscles* are such as are not under the control of the will, as, for example, those of the stomach and bowels.

² *Serous membranes* are always found where two organs or surfaces glide on each other. Their surface is extremely smooth, and covered with sufficient secretion to lubricate the parts.

³ *Mucous membranes* are such as secrete mucus, as, for example, those of the mouth and throat. An ordinary inflammation of a mucous membrane is called “a catarrh.”

or more, while at other times it weighs from two to three ounces.

The uterus is a very movable organ, and constantly changes its position with the movements of the body.

The question, What supports the womb? may now be asked. It has many connections with the surrounding organs, and there has been much dispute as to what its principal supports are, some maintaining that the vagina is its chief support, while others claim that the various ligaments hold it in place. It does not seem reasonable to suppose that the vagina could have very much power in supporting the womb, and the general opinion is, that the ligaments, and its general connection with the neighboring organs by means of cellular tissue, are the chief supports, but especially the former.

THE OVARIES.

The *ovaries* (egg-beds), two in number, are situated one on either side of the uterus, connected with it by ligaments about four inches in length. They are also attached to the broad ligaments. These are two folds of serous membrane (peritoneum), each passing from the side of the uterus to the corresponding side of the pelvic wall, thus dividing the pelvis into two parts, — an anterior and a posterior.

In size and shape the ovaries resemble an almond. They produce the ovules (eggs), which pass through the Fallopian tubes into the uterus. The ovaries are very vascular organs. They are composed of a soft fibrous tissue (stroma). In this we find numerous small vesicles, which have received the name of Graafian vesicles. The surface of the ovaries is covered by the peritoneum, and beneath this is a strong fibrous covering, which encloses the stroma just mentioned.

The Graafian vesicles vary much in size, the smaller ones being in the centre, while those more developed approach the surface, and when perfectly ripe burst, and the

contents pass through the Fallopian tube (the finbriated extremity of which is supposed to grasp the ovary at this time) into the uterus. The contents of each Graafian vesicle are an ovule (egg) and some fluid. This rupture of the Graafian vesicle occurs during menstruation, one or more ovules passing into the uterus at each menstrual period. The ovules are very small, measuring about one one hundred and twentieth of an inch in diameter.

THE FALLOPIAN TUBES.

From the upper part of the uterus pass two tubes, one on either side. These are the Fallopian tubes or oviducts. They are about four inches in length, connected with the cavity of the uterus, and lined within by mucous membrane continuous with that of the uterine cavity.

The use of these tubes is to convey, once in every four weeks, the ovules from the ovaries to the uterus.

THE VAGINA.

The *vagina* is a tube, from four to six inches in length, leading from the external genital organs to the womb. It is composed chiefly of muscular fibres and blood-vessels. Its inner surface is covered with mucous membrane continuous with that of the uterus, and contains numerous transverse folds.

CHAPTER III.

PUBERTY.

THE period at which girlhood passes into womanhood is called the age of puberty. This, as we shall presently see, is one of the great turning-points in a woman's life, — one of the most important eras of her entire career, — one in which she undergoes some most remarkable changes, which render her a totally different creature, — physically, mentally, and morally.

Let us first consider the physical changes that occur during this period. The earliest sign showing that a girl is about to arrive at puberty is an increased deposit of fat under the skin. Owing to this the body assumes a more beautiful form. The breasts, too, enlarge, and are now plainly noticeable. The osseous system develops with great rapidity. The bones of the pelvis especially undergo great changes in a short time, and the hips become quite prominent.

The hair becomes somewhat darker, and grows more luxuriantly. The voice becomes stronger and sweeter. In truth, the voice and the eyes undergo changes which we can readily notice, but hardly describe.

But by far the most important of all the physical changes occur in the pelvic organs, — the womb, the vagina, the ovaries, etc. Hitherto they were dormant, now they are aroused to activity, grow, and prepare themselves for the great work of reproduction. The completion of this development is announced by the appearance of menstruation, a most important function, whose physiology we shall discuss in another chapter.

With us the first menstrual period usually shows itself at the age of fourteen or fifteen years. There are, however, some exceptions to this, due to a variety of causes. Occasionally we see cases reported where menstruation commenced at a remarkably early period, as in the eighth, the fifth, or even the second year. These are peculiar freaks of nature, and do not concern us much here. There are, however, many cases where menstruation first shows itself at the age of thirteen, or twelve, or even eleven years.

These cases of precocious menstruation are sometimes due to a peculiarity of constitution, which is usually inherited, but more commonly to the numerous causes which produce premature development of the nervous system.

In girls living in the country, where they have an abundance of fresh air and plenty of exercise in the form of work, the best of all exercise, and do not overtax the mind, here the general health is good, the nervous system not unduly developed, and, as a consequence, menstruation does not appear before the proper time.

But girls living in cities have a quite different history. They do not enjoy the fresh air, the sunshine, the physical exercise, in short, the healthful surrounding of those living in rural districts. Their occupations are mostly in-doors, and often sedentary, and their diet is unwholesome. But this is not all. One of the worst features of life in cities and towns is the customary system of female education. Much has been written on the injurious effects of this, and I shall not enlarge on it here. The result of all this, combined with the evil influences of the theatre, and the reading of novels and prurient literature, is a condition of general precocity, — precocious development and precocious puberty. In cities, then, girls menstruate earlier than in the country.

I can compare this precocious puberty to nothing more aptly than the apple which ripens prematurely from being preyed upon by some insect. In the case of the girl the

premature ripening is produced not by an insect, but by the artificial methods of living which are the result of civilization.

If the human family is becoming more civilized, — wiser and more æsthetic, — it is at the same time becoming weaker physically.

As said before, there are various circumstances that influence the age of puberty. Climate is undoubtedly the most powerful of these. In hot climates puberty comes on at a very early period, while in cold climates we find just the opposite condition. In hot climates, the first menstrual period shows itself at the age of ten or even nine years; while in cold climates it usually comes on at the age of eighteen or nineteen years.

THE HYGIENE OF PUBERTY.

It is the duty of every mother to explain to her daughters the meaning of those changes which occur at puberty. To some this may seem self-evident, and, therefore, an unnecessary advice on my part. The truth is, however, that it not seldom happens that a girl becomes fearfully alarmed at the first appearance of menstruation. In such cases the mother is certainly culpable.

During the first menstrual period there is usually some nervous disturbance, and sometimes quite serious symptoms appear. Fever, headache, pain in the pelvis, back, and limbs, are quite common; and convulsions, hysteria, and vomiting are not very uncommon.

When convulsions occur it is well to call a physician, and in the meantime use a hot foot-bath, containing some mustard, and apply to the head cloths wrung out of cold water. If bromide of potash is at hand — and it should be in every family medicine-case — give about a half a teaspoonful of this in half a wineglassful of sweetened water. There is not the slightest danger in the use of this medicine.

During the period perfect rest and quietude and a very mild diet should be enjoined. All stimulating articles of food and drink must be strictly avoided. The first period is often very slight, and its return quite irregular for several months. All this need not cause any alarm if the girl is otherwise quite well.

Sometimes puberty is delayed. If the girl is well, I would say, do not be alarmed too soon; nature may bring everything right in good time. If, however, she is not well, or if menstruation be delayed too long, consult a physician.

Puberty is a critical period for a girl, and her general health should by all means be good. If this is not the case she should, if living in a city, spend some time in the country, and take a sufficient amount of appropriate exercise. If she lives in the country, and is delicate, she should strictly observe the laws of health, live temperately, and take a course of tonic remedies.

There are several diseases which are particularly apt to show themselves at this period. One of these is consumption, and for this reason all those girls who have a "family history" of this disease should be unusually careful. They should get the general health into the best condition possible. Frequent exercise of the muscles of the trunk and of the upper extremities is very beneficial.

When consumption attacks a girl who is past the age of puberty one of the earliest symptoms is suppression of menstruation. Hence this condition should always arouse suspicion in those predisposed to this disease.

Hysteria, a nervous affection, and chlorosis (green sickness), a disease of the blood, are also apt to show themselves at puberty.

Exercise. — Regular physical exercise is of paramount importance to every girl at this period. No matter what the station in life of the puberic girl may be she must avoid sedentary habits if she desires to maintain health. In

this respect, strange as it may seem, poverty is sometimes an advantage, since it renders work a necessity. If this happens to be in the kitchen or out-of-doors, all is well. The exercise which a girl gets in the kitchen is amply sufficient; indeed, it is very excellent. It is customary now for girls to avoid the kitchen, and seek some more congenial, and may be more profitable, employment. A prophet might, I think, with a fair prospect of success, predict a scarcity of good house-keepers in the near future.

Education. — Another very important matter in reference to the hygiene of puberty is education. The habit of sending girls to school regardless of the period of puberty is certainly a most injurious one, and a fruitful cause of disease. Mothers are apt to think that their daughters must go to school constantly if they wish to keep up with their classes. So they must; their reasoning is perfectly logical as far as it goes. But let us consider the matter a little further. A lady has a daughter, — a girl of fourteen. Now, this girl has three very important things: a body, a mind, and a soul. All these are valuable; none is to be injured, none to be lost. Education has no special influence on the soul. Our best educated people are not always the most religious; many are infidels. The Apostles were mostly illiterate men. The body is certainly injured by hard mental work and want of exercise during puberty. The mind is, no doubt, benefited by study for the time being; but a rest of six months at this period will at the end be no loss at all, but a gain. The body will be stronger, and better able to fight the battle with the books.

I would say, then, to parents and guardians, *Let every girl who goes to school have a vacation of six months, beginning with the appearance of the first menstrual period.*

An immense amount of good would accrue from the observance of this suggestion. Even a shorter vacation would be beneficial.

CHAPTER IV.

MENSTRUATION.

MENSTRUATION consists of a periodical discharge of blood from the female sexual organs, occurring once in every four weeks throughout the period of sexual activity. During pregnancy, and usually also during lactation (suckling), menstruation does not occur.

Menstruation has been the subject of much controversy among physicians and physiologists, but now the question is tolerably well settled, the general opinion being that it is due to ovulation.

By ovulation we mean the ripening of one or more ovules (eggs) in the ovaries (egg-beds), and their passage through the Fallopian tubes into the womb. Ovulation is the principal process, while the discharge of blood is merely a result.

The source of the menstrual blood is the mucous membrane lining the body of the womb, and perhaps also, to a certain extent, that lining the Fallopian tubes. We can easily understand that neither a mucous membrane nor any other tissue can bleed unless its blood-vessels are opened, either by external injury or by an unnatural pressure from within, or a degenerative process.

The mucous membrane of the body of the womb differs from every other mucous membrane of the body, especially in one particular, — it is thrown off once in every four weeks. This occurs at the time of menstruation, and is the immediate cause of the bleeding.

In health this membrane is thrown off cell by cell, and

is thus carried away with the menstrual blood unnoticed. In some diseased conditions it is thrown off in several large pieces, or in a single piece, representing a cast of the uterine cavity. In these cases the most excruciating pain accompanies it. This has received the very appropriate name of “membranous dysmenorrhœa.”

Just before and during menstruation the womb, vagina, ovaries, etc., are all in a state of congestion, —a normal congestion, — *i. e.*, they contain much more blood than at other times, and still there is no diseased action. As a result of the unusual amount of blood contained in the womb it becomes larger and heavier, and assumes a lower position in the pelvis than at other times.

The physiology of menstruation is, however, still a disputed question in some respects. A noted English surgeon (Lawson Tait) believes the Fallopian tubes to be the chief factor in the production of menstruation. Menstruation usually lasts for a period of from four to six days. Different constitutions vary greatly, however, and in this respect every woman has a law of her own, some always menstruating for three or four days only, while others regularly menstruate for six or seven days. We see, therefore, that there is no fixed law for all women, and what would be normal in one individual might in another case be looked upon as a serious deviation from health.

When, however, a woman regularly menstruates for a certain length of time at each period, and suddenly finds that she menstruates for an unusually short or an unusually long time, she can be sure that there is some local or constitutional disease.

In a healthy woman menstruation usually returns regularly every twenty-eight days, except during pregnancy and lactation. There are, however, some exceptions to this rule. Some women menstruate regularly every three weeks, and are perfectly healthy. It is with them no disease, but a constitutional peculiarity, often inherited.

Others, again, menstruate only once in five weeks. This, also, cannot be looked upon as abnormal if it returns in this way regularly from puberty. Both of these conditions are exceptional, and usually, when a woman menstruates more or less frequently than once in four weeks she is suffering from some disease of the reproductive organs, either the uterus or the ovaries, or from some marked constitutional disturbance.

The patient, herself, frequently considers the menstrual irregularities as the primary disease, while in reality they are merely symptoms of disease. One very important exception must be noted here. Any great and sudden change of climate or occupation is apt to cause a temporary cessation of the menstrual function, even for a period of three or four months. This is consistent with a perfectly healthy condition of the reproductive organs. It is often noticed in travelling, and those moving to a foreign country. It also frequently occurs in girls attending boarding-schools.

THE HYGIENE OF MENSTRUATION.

It is the duty of every woman to preserve her health when she is in full possession of the same; and it is likewise her duty to try and regain it when she is the subject of disease. All this is generally admitted.

But it is equally true that the great majority of women disobey the laws of health at every menstrual period. Some do so from carelessness, many from necessity, but the majority from ignorance.

Every civilized woman should rest in the recumbent posture during a good part of every menstrual period.

Many of my readers will no doubt be somewhat surprised at seeing this statement. They may, perhaps, consider it an exaggeration, or an expression of a peculiar view. I believe, however, that it is neither.

Although rest during the menstrual period is of very

great value to all, it is especially important for those suffering from some disease of the womb. To those I would say, make it a rule to lie down for about three days at each menstrual period. I do not mean that confinement to the bed is necessary; lying on a lounge will usually answer every purpose.

To those who have never before paid any attention to this, it is surprising to notice what a beneficial effect absolute rest (mentally and physically), during this period, has on the system.

Another matter of almost equal importance is the *avoidance of cold and wet during the menstrual period*.

When a menstruating woman gets cold and wet feet the blood is driven to the internal organs, and an acute congestion of the womb is apt to be the result. If this be the case the menstrual flow becomes suppressed. This is a very bad condition of affairs, and is often the starting-point of chronic womb diseases, which give rise to much pain and annoyance. The treatment of this condition is described in detail in the chapter on Amenorrhœa.

Excitement, unfavorable news, anger, or fright, — all have a bad effect on menstruation, frequently suppressing it suddenly. These conditions, should, therefore, be avoided as much as possible.

CHAPTER V.

THE NATURE OF FEMALE DISEASES.

VERY few of the many women who suffer from diseases of the womb have any conception of the nature of these troubles, notwithstanding the fact that they read books on the subject and hear physicians explain their diseases.

Those patients who have an idea of the nature of their ailments, and of the physical changes which their organs have undergone, are much better able to appreciate the importance of many of the directions of their physicians, and, consequently, more apt to carry them out carefully than those who lack such knowledge. This is certainly my experience.

For these reasons, then, I shall give my readers a brief description of the changes which the uterus and its appendages undergo during disease.

The diseases which affect the human body may be divided into two classes, — general (or constitutional) diseases and local diseases. In the former class there is usually a poisonous element permeating the entire system, but which preferably attacks certain organs. In the latter class (local diseases) the disease is confined to a particular region or organ. Diseases of the womb belong to the second class. They are local diseases, but through the medium of the nervous system they usually disturb remote organs, while in turn they may be the result of diseases of other organs.

Thus, we may have palpitation of the heart due to disease of the womb; while, on the other hand, organic disease of the heart may cause congestion of the uterus.

The various diseases of the uterus act and react upon each other in a very remarkable manner, so that in a given case we usually find four or five different diseased conditions, each of which has a name, and might be termed a disease. We can thus easily understand why a patient may be examined by several different physicians, and have one pronounce her case “catarrh” of the womb, another, “ulceration,” while still another will tell her that she has “falling of the womb.”

She may have all these, and while one will consider the ulceration the chief trouble, another will look upon the falling of the womb as being the most important element.

But the *prime factor* in nearly all the diseases of the uterus is *hyperæmia* (congestion). By this I mean that there is too much blood in the parts.

There is, however, such a thing as a physiological hyperæmia,—that is, a healthy congestion. A healthy hyperæmia is intended for some useful purpose, and causes no pain. The blush on the lover’s cheek, which serves to express feelings when the tongue fails to do its duty, is an example of this.

Again, during digestion, we find the mucous membrane of the stomach the subject of a physiological hyperæmia, which serves to supply the glands situated in these parts with sufficient blood to secrete the gastric juice, which is now needed in large quantities, while in the intervals of digestion it is not secreted at all.

The uterus, too, is the subject of a physiological hyperæmia. At the menstrual period the womb and its appendages become very decidedly hyperæmic. But this healthy hyperæmia does no harm. It is only when these organs contain an unusual amount of blood, during the intervals of menstruation, that we find symptoms of disease. The term *congestion* is most commonly applied to this condition.

When we have congestion of an organ for some time we are almost certain to have inflammation supervene. Con-

gestion and chronic inflammation, such as affect the womb, are, generally speaking, very near akin. Congestion is the starting-point, and we cannot have inflammation without congestion.

But you will ask me what causes this congestion? The causes are numerous. One of the most common is a laceration of the neck of the womb, occurring during labor. Another extremely common cause is a condition termed "flexion" of the uterus, where this organ, instead of being nearly straight as it should be, is bent either forwards (anteflexion) or backwards (retroflexion).

In this condition the veins of the uterus are compressed to such an extent that the circulation of the blood is greatly retarded, and, as a natural consequence, we have congestion and inflammation. Some may ask, "Why is the circulation of the blood in the arteries not retarded?" The answer is, that it is retarded, but only very slightly, since the heart forces the blood through the arteries with considerable force, while in the veins this is wanting.

The result of this bending of the uterus is very similar to that produced by tying a cord tightly around a finger. The heart pumps the blood with such force through the arteries that the pressure produced by the cord will not obstruct its passage, but the blood in the veins, coming from the end of the finger, is not propelled by the heart, and, consequently, is almost unable to work its way through.

Here, then, we have marked congestion and swelling of the finger, accompanied by pain. A condition very similar to this is produced in flexion of the womb.

There are numerous other conditions which produce congestion of the pelvic organs, such as a sudden chill, or wet feet during menstruation, valvular or other organic diseases of the heart, hemorrhoids (piles), constipation, etc. Further on I shall have a good deal more to say in reference to constipation as a cause of congestion of the pelvic organs, as I believe it to be a very fertile and certainly avoidable cause.

When the womb is much congested we are very apt to have an inflammation of the mucous membrane lining the inside of its neck and body. This is usually called catarrh of the womb, or endometritis. This catarrh is very commonly limited to the neck or cervix of the womb, and is then called cervical catarrh.

Whenever we have an inflammation of a mucous membrane there will be an increased secretion of mucus from the glands of the parts. We thus see that leucorrhœa is nothing more nor less than an unhealthy secretion, due to catarrh of the uterus or vagina, or both, as is very often the case.

The secretion from the mucous membrane of the neck of the womb consists of a white ropy substance, very similar to the white of an unboiled egg. When a woman notices this discharge there is no doubt about her having a catarrhal inflammation of the mucous membrane lining the neck of the womb, although she may have much more in addition. Leucorrhœa, then, is merely a symptom of disease, and not a disease of itself.

When the mucous membrane lining the canal of the neck is the subject of inflammation (catarrh) we frequently find the mucous membrane covering the lower end of the neck also inflamed and shedding its epithelium, causing an erosion, or, as it is usually but improperly termed, "ulceration." Many of those who are the subjects of chronic disease of the womb have their ears full of "ulceration."

Many cases of ulceration are merely the raw surfaces of a gaping neck of the uterus, which was torn during labor and remained unhealed.

In 1845, Bennet, of England, wrote his classical work on inflammation of the uterus. In this he promulgated the idea that ulceration of the neck of the uterus is the chief element in the production of the numerous symptoms due to disease of the womb. Following the teachings of Bennet,

physicians examined every case for an ulcer, and if one was found it was sure to get a good dose of caustic. This treatment was, no doubt, of benefit in some cases, but it did not strike at the root of the disease.

If an ulcer is the result of congestion of the uterus it will soon return, even if temporarily healed by means of caustics. If it is the raw surface of a lacerated neck it usually cannot be cured unless an operation be performed.

Congestion and inflammation of the uterus, like these conditions in other organs, are accompanied by varying degrees of pain. This pain is not only in the pelvis, but radiates into the back and limbs.

Having considered the nature of congestion and inflammation of the womb, and expressed myself as being one of those who consider these conditions the chief element in disorders of this organ, let us now consider the various displacements to which it is subject.

Formerly there were many who believed the displacements of the uterus to be the cause of almost all the trouble in diseases of this organ. There are still some who believe this, but we do not at present meet with many who believe almost exclusively in this mechanical theory of the causation of uterine disease.

No one who has a practical knowledge of these diseases doubts that displacements of this organ give rise to suffering. But it seems that suffering is produced only when the uterus is at the same time (probably as a result) congested and inflamed.

In some cases a marked displacement of the uterus exists for years without producing congestion. Here the patient is not aware that there is anything wrong with the uterus, since it produces no disease.

We may also find the womb *turned*, either forwards (called anteversion) or backwards (called retroversion). But usually when the uterus is turned it is also bent. The womb may also assume a lower position in the pelvis than

normal, constituting what is called “falling of the womb,” a very common trouble. This latter condition will be discussed in detail in Chapter XIII.

The diseases thus far referred to are quite common, but there is one other important disease that also occurs very frequently. I refer to the so-called “subinvolution” of the womb, — a disease that requires very careful study. After labor, the uterus is, of course, much larger than before pregnancy, but a process termed involution immediately commences, and reduces it again to its ordinary size and form in a period of from four to eight weeks.

When from any cause this process is arrested prematurely we have a uterus larger than normal, congested and prone to take on inflammation, and very apt to become displaced. This condition is termed “subinvolution,” a very appropriate name, and it will be described more in detail in the chapter on the causes of female diseases.

Having now considered the nature of disease, as it manifests itself in the uterus, I shall briefly refer to the disorders of its appendages, and preëminent amongst these stand the ovaries.

The diseases of the ovaries play a very important part in the disorders of the female reproductive organs, but unfortunately they are placed in such a position that we cannot examine them in a very satisfactory manner. They can be palpated through the tissues covering them, but not near as satisfactorily as the womb. They are frequently diseased, either congested or inflamed; or, what is less common, they are the starting-point of a tumor (ovarian tumor).

We frequently find disease of both uterus and ovaries at the same time. The question then arises, Was the uterus the starting-point, or did the disease commence at the ovaries, or are both diseases due to a common cause? This, of course, varies in different cases, but usually the womb is the starting-point. The ovaries, no doubt, frequently receive injuries during labor. Writers on female

diseases do not usually mention this as a cause of disease of the ovaries, but I am strongly convinced that it is a frequent cause.

Diseases of the ovaries act upon remote organs very similar to diseases of the womb. Dyspepsia and hysteria especially are frequently produced by them.

The peritoneum (the serous membrane which covers the uterus and its appendages) and the cellular or connective tissue (which surrounds the various pelvic organs and aids in holding them together) sometimes become the seat of inflammation, producing peritonitis and cellulitis respectively.

These diseases are practically very similar, and some prominent specialists in this field consider it impossible to distinguish the one from the other. One term — pelvic cellulitis — will, then, answer for both diseases. This disease may be either acute or chronic; and in both forms it is very difficult to cure. We frequently have in this disease abscesses in various parts of the pelvis, — a very unpleasant condition of affairs.

The principal disease affecting the vagina is catarrhal inflammation, which may occur either in the acute or chronic form. Diseases of the vagina differ from those of the uterus and ovaries in this, that they are not accompanied by any sympathetic disorders of the stomach, heart, etc., which are so common in womb diseases. In almost every case of disease of the uterus we find catarrhal inflammation of the vagina as a result.

Having now given my readers a sort of bird's-eye view of the nature of the principal diseases of the uterus and its appendages, and pointed out the intimate relation — often that of cause and effect — existing between the different diseased conditions, I hope that its perusal will render the chapters on the special diseases more intelligible, and, moreover, will convince the reader of the great importance of early and careful treatment in this class of diseases.

CHAPTER VI.

THE CAUSES OF FEMALE DISEASES.

ON observing any phenomenon we naturally ask ourselves what the cause of the same is, and in what manner the causative agent acts in bringing about the result.

So, in studying disease, the same questions present themselves; but I am sorry to say that they are far from receiving the consideration they merit. This, too, often applies to the physician as well as to the patient.

A knowledge of the causes of the diseases of women is of great value, since it will serve as a guide to those who are desirous of preserving health, and will likewise be of inestimable value to those who are anxious to rid themselves of disease.

We are enabled to make a far more useful application of our knowledge of the causes of disease than that of alleviating suffering; we can, by avoiding these causes, prevent disease. This is truly a large and noble field for all conscientious physicians. They can really do far more good here than in treating disease, which too often is entirely beyond the reach of all known remedies. "An ounce of prevention is worth a pound of cure." This is an old but very true adage. Everybody quotes it; we all recommend it; but how few there are who heed it!

An individual possessing good health very rarely sees the importance of using precautionary measures in order to maintain the same. An investment of a few dollars is watched with far more anxiety.

The causes of disease are frequently divided into two classes, — predisposing causes and exciting causes. This, however, is not always correct, since a given cause might in one case merely predispose to disease, while in a more delicate individual, or in a person of ordinary health, when predisposed by other causes, it might excite disease. I shall, of course, treat the subject from a practical stand-point.

We have many established facts and laws in reference to the causes of female diseases, and still there seems to be some prominent cause that has thus far entirely escaped recognition, or is insufficiently appreciated, since there are still quite a number of cases which cannot be traced to any of the ordinary causative agents.

But be this as it may, I have long ago come to the conclusion that *the unnatural habits of life which civilization entails upon us are among the most powerful of all the causes of female diseases.*

What these habits are, or in what way the habits of a highly civilized people differ from those who live a more natural life, we all know very well. I do not mean that these habits have any special effect on the womb ; but, owing to their influence, the system becomes weaker, and much less able to resist disease of any kind, and the female reproductive organs so often receive the brunt, because they are especially predisposed to disease by the two physiological acts, menstruation and reproduction.

The former causes a monthly hyperæmia, which lasts from five to seven days, and, although it is physiological, it strongly predisposes to disease. The latter — reproduction — produces so many changes in the womb — changes in size, shape, consistence, and position — that it predisposes still more strongly to disease.

One of the most pernicious habits due to civilization is the use of indigestible and, therefore, unwholesome food. There is very much to be said on this question of diet, but space does not permit me to enter into details. It is a

matter that is worthy of much thought. In the first place I would say that all highly-seasoned food is injurious, and spices should be avoided as much as possible. The various articles in the line of pastry have done an immense amount of mischief to American stomachs as well as the bodies which they supply with pabulum for the sustenance of life.

Plain diet — milk, Graham bread, soft-boiled eggs, beef, and vegetables, constitute the main articles that we should subsist on if health is the object; but if luxury is the point aimed at, then a very different line of dishes is wanted.

Another matter that comes under this head is *dress*. The principal physical sin that women commit in dress consists in *tight-lacing*. A small waist looks decidedly prettier than a large one. So far I agree with the ladies. But a small waist usually means a tight corset, which causes such a pressure on the waist as to interfere with the circulation of the blood, and tend to the production of *pelvic congestion*, which, you remember, we considered the chief element in most female diseases.

I very well remember seeing a case where the liver was marked by deep linear indentations, produced by the ribs having been pressed strongly upon it. This had, no doubt, been done by tight-lacing. The case made a strong impression upon my mind, showing, as it did, what effect external pressure, such as lacing, will have on internal organs.

In-door life, especially when sedentary, as it usually is, has a bad influence on female health. It produces disordered digestion, constipated bowels, anæmia, and a condition of general relaxation of the muscular system. School-houses and cotton-mills ruin the health of many American girls who might have made good wives and mothers. Women want air and exercise in order to remain healthy. Deprive them of these, and you do harm.

Occupation seems to have considerable influence in the production of disease. Women who do much ironing, especially those working in laundries, as well as cooks, are apt to have falling of the womb. Running the sewing-machine produces pelvic congestion. It always aggravates cases of womb disease, especially does it increase leucorrhœa (whites). Indeed, sewing-machines, although they are now practically indispensable, do considerable harm to those who use them constantly.

Mental work. — There has been much said and written about the bad influence of mental work on health. The facts seem to be about as follows: girls are able to stand almost as much mental work as boys, providing they take sufficient exercise in the open air. The latter is, however, very often neglected. The in-door life and want of exercise seems to be the chief cause of trouble in these cases. Every boarding-school should have a good gymnasium, and all the scholars of both sexes should be compelled to use it.

Amenorrhœa (stoppage of the period) is pretty often found in girls attending boarding-schools; but this, too, is probably due chiefly to the confinement.

At the period of puberty a girl should, as said before, take a vacation of about six months.

Pregnancy and Labor, strange as it may seem, predispose strongly to womb troubles, owing to the accidents which are apt to occur at these periods. We have here, then, physiological processes as predisposing causes. Indeed, fully one-half of all cases of womb disease have their origin in a particular labor or miscarriage. This subject, then, is worthy of very close study.

When a woman conceives, the womb immediately becomes subject to a healthy hyperæmia, — it receives an unusual amount of blood, in order to furnish material for the development of the new being.

The womb now commences to grow, so that it may accommodate itself to the growing ovum within, and at length,

when the proper time comes, expel it. The womb consists chiefly of muscular fibres, connective tissue, and blood-vessels, and all these, in order to perform their respective functions, grow during the entire period of pregnancy.

The average size of the womb in the unimpregnated state is three inches in length, one inch in thickness, and two inches wide, above ; and its walls are about half an inch thick.

At the end of pregnancy the same organ has a cavity large enough to contain a child, and its walls are almost as thick as when it was only three inches long. We can, then, understand that it must have grown a great deal during the nine months of pregnancy. In the unimpregnated state the womb weighs only two or three ounces, while at the end of pregnancy its weight is from one and one-half to two pounds.

As soon as the womb has expelled its contents a process the opposite from that just described commences. This process is termed "involution," and consists of a fatty degeneration and absorption of the tissues of the womb, which are no more needed. It requires about six weeks for the womb to return to its usual size. After the first labor, however, it always remains a little larger than it was before pregnancy. A very large proportion of the cases of womb disease are a result of an interference with this important process of involution.

The condition resulting when involution is interfered with is termed "subinvolution." We have here a womb much larger than natural, congested, and very often the subject of catarrhal inflammation of the mucous membrane lining the canal of its neck and the cavity of its body (endometritis). Very frequently we find also that, owing to the softened condition of its tissues, the womb becomes bent on itself (flexed), usually backwards (retroflexion). Subinvolution is in reality an abnormal condition in itself, and is the first stage of chronic inflammation (metritis) and enlargement of the womb.

We thus see the importance of involution, and can now easily understand how *anything which interferes with this process acts as a cause of disease of the womb.*

Pregnancy, of course, is the great predisposing cause, since without pregnancy we have no involution. The exciting causes of subinvolution are some of the accidents connected with labor or abortion, and unfavorable conditions during the period of involution. There are two conditions necessary for the perfect performance of involution, — active absorption and diminished blood supply. Whatever disturbs these conditions is almost sure to cause subinvolution.

Laceration of the Neck of the Womb, during labor, is of common occurrence, and is one of the prominent causes of uterine disease. Up to the time of labor the mouth of the womb is quite small, but now a remarkable change takes place. Before labor its diameter is perhaps a quarter of an inch, while during labor it becomes dilated sufficiently to allow the passage of a child. This process of dilatation constitutes the first stage of labor, and gives rise to the so-called “grinding” pains. The womb contracts and forces the “bag of waters” into the mouth of the womb, and gradually dilates it. To produce this gradual and harmless dilatation of the mouth of the womb is the function of the “bag of waters.”

But sometimes the process is slow, and if the physician is an unscrupulous man he ruptures the membranes early, before the mouth of the womb is dilated, since this increases the pains, hurries labor, and “saves time.” This is, however, very injurious, since the pressure of the child’s head directly against the mouth of the womb, and the powerful contractions of the uterus, are apt to result in a laceration of the neck.

Such a laceration, if only superficial, or if it run directly forwards or backwards, is not apt to do much harm, as in either case it usually heals without any untoward consequences; but if the laceration run to either

side, as it is apt to do, and goes in pretty deep, we are likely to have very unpleasant consequences, since in this case the wound gaps, heals slowly, and is very apt to remain as an open ulcer for years. This is one of the conditions formerly considered as simple ulceration.

Laceration of the neck is one of the most common of all the causes of subinvolution of the uterus. This it does by keeping up congestion of the parts, and involution, as said before, requires a diminished blood supply.

In saying, as I did above, that rupture of the membranes causes laceration of the neck, I do not wish to be misunderstood. Rupture of the membranes is perfectly proper at the right time if nature does not do so; but doing so before the mouth of the womb is sufficiently dilated is what does mischief. In this manner a physician is sometimes responsible for years of suffering.

Laceration of the Perinæum is another common accident of labor which gives rise to much disturbance. The perinæum is a triangular body, composed of muscles and tendons, situated between the vagina in front and the lower bowel behind. In other words, it is the wall between the vagina and rectum; thin above, but about an inch and a half or two inches thick below.

This fleshy body may tear in labor during the passage of the child's head, especially in the first labor, or in subsequent labors if they be very quick or the child unusually large.

If the laceration is very extensive it is almost sure to produce some displacement of the uterus. The perinæum supports the vagina, and this in turn, in a measure, supports the womb, so that we might class it with the natural supports of this organ. In lacerated perinæum the uterus not only loses the support of the vagina, but is really pulled upon by the prolapse of the latter, which is almost sure to occur. The most common form of displacement of the womb resulting from this condition is "falling of the

womb.” Retroflexion is also quite frequently found as a result.

But laceration of the perinæum does more — it produces subinvolution of the uterus, and this in turn gives rise to a long train of disturbances, as already mentioned as occurring in that condition.

Lacerated perinæum acts in still another way in causing diseases. It presents a raw surface, which is prone to absorb septic material giving rise to puerperal fever, or pelvic peritonitis or cellulitis. It is, however, exceptional to find these latter conditions in a case of lacerated perinæum.

We not seldom find that, owing to ignorance, necessity, or self-will, women *get up too soon after labor*, contrary to the advice of the physician. It is customary to remain in bed until the ninth day, but some get up on the third or fourth day. Not a few of these boast of the violations of the doctor’s directions, and while some few of unusual vigor can do this with impunity, the majority will suffer from such disobedience.

A woman who gets up too soon after labor, unless she be unusually strong, is very apt to disturb the process of involution of the womb (previously described), and produce the condition termed “subinvolution,” and, subsequently, suffer from the disorders which this condition usually gives rise too, namely, chronic inflammation and ulceration of the womb, leucorrhœa, etc.

After getting up the mother should strictly avoid any but the very lightest work. Those who are in delicate health, and especially if subject to uterine troubles, should be kept in bed for fully two weeks, or longer, instead of nine days. This would give the womb a much better chance to make a good beginning at involution, which usually requires from six to eight weeks for its completion, and is very apt to be retarded by debilitating disease.

I am now referring to labor at full term ; but my remarks

apply equally well to miscarriages. Many women look upon miscarriages as being of little importance, and, consequently, remain in bed for a few days only, while they should remain there as long as they would after labor.

But, besides lacerations of the neck of the womb and perinæum, we sometimes find, as a result of a *difficult labor*, such a contusion of the tissues of the vagina as will produce sloughing of the parts. As a result of this we find openings between the vagina and bladder, or, what is less common, between the vagina and lower bowel (rectum). These are termed, respectively, vesico-vaginal and recto-vaginal fistulæ. They are certainly loathsome diseases; but, thanks to the noble science of surgery, we are now enabled, by perfectly safe operations, to produce a permanent and radical cure in such cases. This is due in great measure to the labors of two of our countrymen, — Sims and Bozeman.

These injuries are not, as a rule, due to the use of instruments, as might be supposed; but very often result in cases where the timely use of instruments would have prevented them. They occur in cases where the head is unusually large, or the pelvis unnaturally small, or both conditions combined, and particularly when a woman is in labor a long time before she receives the aid of a medical attendant.

This is, no doubt, the reason why those cases occur far more frequently among the poorer classes, where labor-cases are commonly attended by midwives.

There is another matter connected with child-bearing that is well worthy of study, I mean *lactation* (nursing). Lactation greatly aids involution, whose importance I dwelt upon. When the infant is put to the breast it produces a contraction of the womb, a condition very essential to involution. In some cases, indeed, nursing produces such violent contractions as to cause almost intolerable pain. Thus we see that there is a very close sympathy between the breasts and the womb.

But lactation does more than aid involution by producing uterine contractions, — it gives physiological rest to the pelvic organs. After having been in a condition of remarkable physiological activity unintermittently for a period of nine months, the womb certainly wants rest. During lactation the pelvic organs, as a rule, lie dormant; ovulation and menstruation do not occur, and hence conception cannot take place.

Such, then, are the benefits derived from lactation. The injuries resulting for want of it are corresponding. A suppression of the functions of the breast by not nursing the child, whether done because it is impossible to do otherwise, or on account of some foolish notions of the mother, is in either case equally injurious, and is a cause of womb disease.

There are not a few women of the better classes who prefer the pleasures of society to the duty they owe to themselves and their children. Such women either raise their infants with cow's milk, or, what is better, procure a wet nurse. But neither will, as a rule, answer as well as the mother's milk, so far as the welfare of the child is concerned.

The improper use of the bandage after labor has a bad effect on the womb. Some physicians even ignore its use entirely. This is decidedly wrong, since there is no doubt that, when properly applied, it does no harm, but decided good by stimulating uterine contraction, and thus preventing hemorrhage. Besides this it is usually a source of much comfort, and seems to produce a better form than would otherwise result.

But when used improperly, that is, applied too tightly, with a very large compress underneath, it presses the womb backwards, and causes congestion of it. This is not seldom done by those who pride themselves on producing "fine forms."

Abortions (miscarriages). — While labor at full term is a

perfectly physiological act, abortion or miscarriage is decidedly abnormal.

An abortion may be produced by an almost endless number and variety of causes; but no matter what the cause may be, its influence on the subsequent condition of the womb will be very much the same.

After an abortion the womb undergoes the process of involution just as it does after labor at full term, with this exception, that it does not have the usual stimulant of an infant sucking at the breasts. This one cause alone renders abortions much more apt to produce disease than labor at full term. Besides this, some women, as stated before, get up too soon after a miscarriage, and thus interfere with involution of the womb.

In abortions, the placenta (after-birth) is frequently very tightly adherent, and sometimes a part of it remains in the cavity of the womb, and gives rise to repeated hemorrhages for weeks following. When a part of the placenta is retained for a long time it is very apt to produce congestion of the womb, and thus interfere with involution.

But there is one other very important point connected with abortions. I mean the fact that sometimes they are *criminally provoked*. There are some exceptional instances where the physician is justifiable in producing an abortion. Among this class belong cases where there is some deformity in the pelvis, rendering it impossible to give birth to a child at full term.

But, usually, when an abortion is provoked it is criminal, for a crime it certainly is to bring on a miscarriage for the purpose of evading shame by hiding sin from the eyes of the world. But the moral question does not come within the scope of the present work.

I would gladly pass the subject in silence; but when I am writing on the causes of female diseases I cannot do so. The subject should be clearly understood by all. There is, I am sorry to say, an immense army of American women

who are complete wrecks, — physically and morally, — simply as the result of criminal abortion.

An abortion that is provoked, especially when instruments are used, is much more apt to be followed by untoward results than one that is brought on by disease of the womb or accident. Very frequently we find inflammation of the cellular tissue of the pelvis — pelvic cellulitis — as a result of provoked abortion. This gives rise to much trouble, and is frequently very rebellious to treatment.

Imprudence during Menstruation. — The proper and healthful performance of the menstrual function is a matter of extreme importance to every woman. Any disorder of menstruation is apt to be accompanied by considerable disturbance of the general health, or, at least, much discomfort. But, in spite of all these facts, women will persist in disobeying well-known hygienic laws during this period.

Exposure to wet during this period, or a sudden chill, or getting the feet wet, are apt to stop the flow by producing a congestion of the womb. This condition is one that we are frequently called upon to treat, and it is not seldom the starting-point of chronic disease of the womb, lasting for years.

Constipation. — This may seem to many a very trifling matter to mention, and it might be considered as being entirely foreign to the diseases of the womb. It is, however, not a trifling matter, nor can it be considered unimportant as a cause of female diseases. Perhaps none of the so-called minor ailments do so much harm to women as constipation. It is extremely common in women. The reasons for this are chiefly these: Their life is greatly sedentary and in-door, with comparatively little exercise, and frequently, owing to false ideas of modesty, surroundings, or occupation, the calls of nature are not promptly obeyed.

There are, perhaps, few conditions that tend more to the production of pelvic congestion than constipation of the bowels, and congestion, as stated before, is the starting-point of the majority of cases of womb disease.

CHAPTER VII.

THE SYMPTOMS OF FEMALE DISEASES.

THE symptoms which a diseased womb may give rise to are many and various. A study of them is, to some women, a matter of considerable importance, since many a woman believes herself the subject of dyspepsia, pure and simple, while in reality her dyspepsia is merely a symptom produced by some disease of the womb. Such women first exhaust all the home remedies, then try in succession a good share of the numerous patent medicines which are guaranteed to cure the disease, while finally many come to their senses and consult a physician. Such cases usually have ample time to progress from bad to worse; but had they a suspicion that the womb is the cause of the trouble they would consult a physician at a time when their diseases are more amenable to treatment.

The womb is in a great measure independent of the rest of the body. Indeed, its existence is in no way essential to life. Most of the internal organs of the body give rise to no sensation whatever during health. Such are the womb and ovaries.

During disease, however, these organs produce many symptoms. Through the medium of the nervous system they may disturb almost every organ of the body.

Let us first study the symptoms of a typical case of womb disease. This case is, of course, an imaginary one; but there is nothing unusual about it, as I have many quite similar cases under treatment.

We will call the patient Mrs. A. Her general appear-

ance is that of an invalid ; she is pale, and looks careworn, although in reality she has no cares other than her disease. Her facial expression tells the experienced practitioner that she is suffering from some uterine disease.

We elicit the following history. She is thirty years of age ; married at eighteen ; had one child ten years ago, and since then has been sterile. Her labor was pronounced by the physician a perfectly natural one. Her troubles date, however, from the confinement.

For the last ten years she has been suffering from severe backache, pain in the abdomen, often shooting down the thighs, and sometimes bearing-down pains. During menstruation she suffers almost intolerable pain. A profuse discharge, which is almost constant, renders her still more miserable. The digestive organs are much disturbed. A capricious appetite and belching up of wind after eating are almost constant. The bowels are costive, and, owing to imperfect digestion of the food, gases form in unnatural amounts in the stomach and bowels. The result is a swelling of the abdomen, necessitating her to loosen the clothing.

She also imagines herself to be the subject of heart disease, since the least excitement or exertion produces palpitation. She is very nervous, and frequently has peculiar sensations in various parts of the body. Headache, too, is frequently present, especially pain or a peculiar burning sensation on the top of the head.

Her mind has undergone certain changes. It is full of strange fancies, but the predominant mental symptom is melancholia, which comes on without any apparent cause. Black spots and various imaginary bodies float before the eyes. Her hearing is slightly impaired, and at times she has singing in the ears.

A physical examination reveals the following : The womb is enlarged, tender to the touch, and inflamed ; its neck is lacerated and its body is bent backwards (retroflexed). The left ovary is enlarged, prolapsed, and tender.

Here, then, we have a typical case of "womb disease." There are hundreds, yes, thousands, of just such cases in our own State,—cases, at least, which present all the symptoms detailed above, and which on examination prove to have the same physical conditions as the cause, namely, an enlarged and retroflexed uterus, with the neck lacerated during labor, and one ovary, usually the left, enlarged, tender, and prolapsed.

All this seems sad enough, but what makes it still more so is the fact that the majority of such cases wind up with a remark like this: "O doctor! I have tried so many physicians without obtaining any relief, that I have almost given up all hopes of ever getting well again."

But the fact is that many such cases are treated for dyspepsia or nervous debility, or palpitation of the heart, *regardless of the condition of the womb*. When properly treated such cases should certainly get relief; but I shall consider this matter of prognosis,—the prospects of a cure,—in another chapter.

To return, then, to the symptoms of female diseases. Their description would be rendered more intelligible by dividing them into two classes: 1. Local symptoms, and 2. Sympathetic symptoms.

LOCAL SYMPTOMS.

The most important of these are: 1. Irregularities of menstruation. 2. Pain in the lower part of the abdomen and pelvis. 3. Painful menstruation. 4. Leucorrhœa ("Whites"). 5. Bladder symptoms. 6. Disorders of the rectum (lower bowel). 7. Abortions (miscarriages). 8. Sterility (barrenness).

1. *Menstrual irregularities*, in some form or other, are present in almost every case of womb disease. As to frequency, menstruation often loses its accustomed regularity, occurring sometimes too frequently, and at other times less frequently than natural. As to quantity it varies consider-

ably with different diseases. In the latter stages of chronic inflammation of the uterus it is usually diminished. The same is the case with pelvic cellulitis when it has existed for a number of years, while in its earlier stages it is decidedly more profuse than natural. In ordinary cases of congestion of the uterus a woman usually menstruates much more freely than in health. In many cases we even have a loss of blood between the periods, continuing sometimes for weeks. This is termed "metrorrhagia," while profuse menstruation is called "menorrhagia." Both of these conditions are, however, usually due to very much the same causes.

These symptoms are especially common in two classes of cases, — fibroid tumors of the uterus and chronic inflammation of the mucous membrane lining the cavity of the womb (endometritis), accompanied by peculiar granular outgrowths somewhat similar to "proud flesh," as frequently seen in a wound during the healing process.

2. *Pain* in the lower part of the abdomen and pelvis, radiating into the thighs, is a common symptom. Sometimes the pain is limited to a small spot on one side, usually the left. This pain is frequently situated in the ovaries, and may indicate disease of these organs, though not necessarily so. In truth, however, the ovaries are more or less diseased, congested, or inflamed, in the great majority of cases of disease of the womb. In many cases there are bearing-down pains in the lower part of the abdomen. These often return quite frequently, and seem to be due to contractions of the womb.

But the most common seat of pain is the small of the back. It comes on especially after any exertion, such as washing, scrubbing, or even walking. That these pains in the back are due to disease of the womb is beyond doubt. I have frequently noticed, while examining patients, that on touching an inflamed womb they complain of pain in the back. Such demonstrations usually suffice to change the opinion of those who look upon these severe backaches as

being rheumatic. In other cases, again, we find “peculiar sensations” which patients cannot describe.

3. *Painful Menstruations* (dysmenorrhœa). — This very common condition may be due to general anæmia (poor blood) or neuralgia, but in the majority of cases it is due to disease of the uterus or ovaries. Strange as it may seem, there are some cases of decided disease of the womb having less pain during menstruation than between the periods. I shall not consider the nature of dysmenorrhœa at present, as it will be described at length in a special chapter.

4. *Leucorrhœa*, or “whites,” as it is commonly termed, is a condition quite as common as painful menstruation. Formerly this was considered a disease; now we know it to be merely a symptom of disease, either of the uterus or vagina. It usually indicates an inflammation of the mucous membrane of these parts. It is always worse just before and after the menstrual period, and a slight discharge preceding and following menstruation may occur in a healthy woman.

5. *Bladder symptoms* are not uncommon, particularly in cases where the uterus is displaced, — bent forwards or prolapsed (fallen). The bladder, being situated just in front of the uterus and vagina, and attached to them by cellular tissue, becomes irritated when this is pulled upon, as in the latter case, and also when the womb presses upon it, as in forward displacements. In some cases bladder symptoms predominate. They may be due to direct pressure, or to reflex nervous action (just as more distant organs are affected by womb disease), or to an extension of the congestion and inflammation from the uterus to the bladder.

The bladder is sometimes so irritable that every ten or fifteen minutes there is a desire to pass water; or there may be a partial paralysis of some of the muscles of the bladder, causing at times an incontinence of urine,— every sudden change of position or cough causing its discharge; or there may be a burning sensation on passing the water.

This is usually due to an extension of inflammation from the vagina to the urethra. An acrid, irritating leucorrhœal discharge is usually present in this class of cases.

6. *Disorders of the lower bowel* (rectum), such as inflammation, hemorrhoids (piles), cramp-like pains, and diarrhœa, are not seldom due to the pressure of an inflamed and enlarged uterus displaced backwards. But, on the other hand, hemorrhoids occasionally induce congestion of the uterus.

7. *Abortions* (miscarriages) occurring habitually usually indicate disease or displacement of the uterus. A woman with an inflamed uterus may conceive and carry a child to full term; but a woman with decided inflammation (chronic) of the womb usually does not conceive at all, and if she does, a miscarriage is apt to follow. The usual form of uterine disease bringing on an abortion is catarrh of the neck of the womb with ulceration. The uterus here seems to be irritable, and prone to contract and expel its contents on a light provocation. Displacements of the womb also frequently produce miscarriages.

When a woman once aborts, as a result of some womb disease, she is apt to miscarry at the same period of every subsequent pregnancy until the disease is cured. This is a very important point, which should be well considered by every woman subject to miscarriages.

8. *Sterility* (*barrenness*). — A large proportion of women having chronic disease of the womb are unfruitful. Barrenness must, then, be considered as one of the symptoms of these diseases. There are two conditions which are apt to cause sterility. One is inflammation of the cavity of the neck of the womb, giving rise to an acrid and tenacious secretion, which either kills the impregnating element or prevents its passage into the cavity of the womb.

The other condition (which seems the more important of the two) is an unnatural constriction in the canal of the neck of the womb. This may be due to a flexion (bending)

of the womb, which practically results in a stricture of the canal, just as a sharp bend in a rubber tube produces a constriction; or there may be a congenital narrowing, which is not very uncommon. Either of these conditions will act as a barrier to the passage of the impregnating element.

Barrenness, then, is usually a symptom of disease of the uterus, or of some congenital imperfection. Both of these conditions can be remedied by proper treatment.

In a large proportion of cases of chronic disease of the womb there is a loss of both sexual feeling and sexual desire. These usually return when the diseases causing them are cured.

SYMPATHETIC SYMPTOMS.

The symptoms which we have thus far considered are all local symptoms, conditions found in the uterus itself or in its immediate vicinity. There are, however, many other almost equally significant symptoms, which occur in more remote parts of the body. It may seem more difficult to comprehend these or understand their relation to the uterus; but it must be remembered that the uterus is supplied with nerves, and that the nervous system connects most intimately the different organs of the body.

These sympathetic symptoms were formerly looked upon as diseases of themselves, not knowing that they were symptomatic of uterine disease. This is even to-day, too, much the case. I must here quote from Dr. Byford's excellent work on "*The Medical and Surgical Diseases of Women.*" He says: "I should not deem it necessary to go into a detail of the particular sympathetic accompaniments of diseases of the uterus, were I not convinced that they are often considered independent affections, and their origin not suspected by very many practitioners; and that an immense amount of suffering is now borne as a necessity by women that might be relieved if we would investigate

and study their ailments with as much patience as, and with no more reserve than, we approach and investigate lung diseases or throat affections.” This expresses my views exactly.

Of all the sympathetic symptoms of womb disease none are of such frequent recurrence as *disorders of the stomach*, or dyspepsia.

There is a close sympathy between the stomach and the womb. This is shown during pregnancy in the nausea and vomiting which result from this perfectly physiological condition. From this we would naturally conclude that during disease of the uterus similar disturbances, differing perhaps in degree, would be found in the stomach; and this really is the case.

There is many a woman to-day who is suffering from sympathetic dyspepsia, due to disease of the uterus or ovaries, and dosing herself in vain with remedies addressed to the stomach. Indeed, such cases are extremely common.

The disturbances of the stomach produced by ovarian and uterine troubles are quite various. In many cases there is a sense of weight and oppression in the region of the stomach after meals, indicating slow digestion; poor or capricious appetite and sour eructations occur in others; while in still another class of cases we find — perhaps in addition to the preceding symptoms, and perhaps in cases having no other symptoms of dyspepsia — a severe neuralgic pain in the stomach often coming on without any known cause.

Again, we find many cases where the formation of large quantities of gases in the stomach and bowels causes much annoyance, — belching up of wind, and a fulness in the stomach, so much so, very often, that it becomes necessary to loosen the clothing. These cases are very common.

Constipation is a condition that occurs so often, in connection with disease of the pelvic organs, that we must consider it as a symptom. Some authorities believe con-

stipation to be a sympathetic system of womb disease. This I believe as a rule; and still there are many cases where it was one of the causes of the disease. The study of constipation is of great importance to every woman, and I propose to consider its management at some length in another chapter.

Diarrhœa, although not as common as constipation, is a pretty frequent symptom of disease of the uterus.

The liver, too, may be disturbed by sympathy. Congestion of this organ may occur. It sometimes, in these cases, secretes bile in excessive quantities; and again it produces it in unnaturally small amounts. In the former case we are apt to have diarrhœa and vomiting of greenish matter; in the latter, constipation with its results.

Disturbances of the nervous system. — Many of the sympathetic symptoms are to be found in the nervous system. The most prominent of all the nervous symptoms is *neuralgia*, which may occur in almost any part of the body. This comes on suddenly, and disappears just as suddenly. Neuralgia is particularly prone to affect certain nerves, especially those of the head.

A woman who has chronic disease of the uterus or ovaries is apt to have pains and aches in almost every part of the body. These pains are of a neuralgic nature. When not too severe, any excitement, whether pleasant or otherwise, usually stops them. When in the midst of a social party these patients do not suffer much. These neuralgic pains are apt to occur in any part of the body, but severe neuralgia, which also occurs frequently in such cases, is specially prone to attack certain nerves. Those nerves emerging from the pelvis and running down the anterior part of the thighs (anterior crural nerves), and those running down the posterior part of the thighs (sciatic nerves), are apt to suffer in chronic inflammatory diseases of the pelvis. So, also, do the nerves emerging from the skull, just above and below the eyes. The nerves running length-

wise between the ribs (intercostal nerves) are also very often the seat of neuralgia, — intercostal neuralgia.

In some cases we find *increased sensitiveness* (hyper-æsthesia) of a particular part of the body. This occurs especially along the spine. In the great majority of cases of uterine disease we find one or more points along the spine that are very painful on pressure. This occurs especially in the lower part of the spine.

We also find, but more seldom, that the scalp or the abdomen are unusually sensitive without any inflammatory condition.

Pruritus (itching) of the external genitals is found in many cases of chronic diseases of the womb. The itching is in some cases almost intolerable, causing constant scratching.

In other cases we find want of ordinary sensitiveness (anæsthesia) in some parts of the body, but this is much less common than the opposite condition. Both are cured by electricity.

Another nervous disorder which is usually due to disease of the ovaries or uterus is *hysteria*. This consists of attacks of partial or complete unconsciousness, and frequently convulsions at the same time, or spells of laughing or crying. There are, besides, these numerous other hysterical conditions, such as the sensation of a body rising in the throat.

The *mind* becomes much disturbed by disease of the uterus and ovaries. One very common condition is melancholia, occurring in all degrees of severity. We nearly always find some mental symptoms. A marked tendency to crying is very common. In fact, this one condition nearly always indicates uterine disease. They not only become low-spirited, but fretful and peevish, and negligent of their ordinary daily duties.

But there is more than this possible; insanity may, and often has been caused by these diseases. This is now

an established fact, and still there are some who dispute it. Having seen a number of such cases myself, I have no doubts whatever concerning it.

Headache, in all its numerous forms, occurs as a direct result of womb disease. We find the neuralgic form in the temples and just above the eyes; or the congestive form, where the head feels as if it would split, accompanied by a throbbing sensation. But the usual form of headache due to disease of the womb, is a pain in the back part of the head, or a peculiar pressure, pain, or *burning* on the *top* of the head. Indeed, some writers consider a burning pain at the top of the head an almost certain indication of womb disease. In other cases we find sick-headache, a symptom occurring especially during the menstrual period. This is usually accompanied by considerable disturbance in the stomach.

Palpitation of the heart is very often met with as a symptom of disease of the uterus or ovaries. I am very frequently consulted by ladies who imagine that they are afflicted with heart disease. Sometimes it is difficult to convince these patients that some other organ is diseased, and not the heart. Disease of the womb causes palpitation of the heart in two ways. It may produce it through the medium of the nervous system, or by first giving rise to dyspepsia, which in turn causes palpitation, for it is a well-known fact that diseases of the stomach are usually accompanied by this symptom. Pressure on the heart by a stomach unusually distended with gases produces palpitation.

CHAPTER VIII.

AMENORRHŒA (*Suppression of Menstruation*).

HAVING given you an idea of the anatomy and physiology of the female reproductive organs, and described, in a general way, the causes, nature, and symptoms of the diseases of these organs, I will now describe such special diseases as seem to merit consideration in a work of this nature. The treatment laid down will be such as can easily be carried out by any patient of ordinary intelligence.

In describing special diseases, I shall begin with amenorrhœa (suppression of menstruation). Before puberty (about the age of fourteen years), and after the "change of life" (about the age of forty-five years) menstruation does, of course, not occur. Nor is it, as a rule, seen during pregnancy and nursing. During pregnancy there is sometimes a discharge of blood apparently menstrual, though in reality it is merely a bleeding. But during lactation we occasionally find typical menstruation occurring.

By amenorrhœa we mean, then, the absence of menstruation at a time when it should occur. Amenorrhœa is naturally divided into two distinct forms. 1. Cases where menstruation has not appeared when the age of the girl is beyond that of puberty. 2. Cases where menstruation had already been established and subsequently became suppressed.

We will begin by considering the first class of cases, — those in which menstruation had never occurred. In a cold climate puberty is always late. Heredity, too, has sometimes an influence in retarding the first appearance of men-

struation; but this is still a condition of health. If the mother and grandmother of a girl have menstruated for the first time at the age of nineteen, she need not expect to see her periods any earlier than this.

When a girl arrives at the age of sixteen or seventeen years without menstruating, the mother usually becomes somewhat alarmed, and consults a physician as to the cause of this delay. In these cases we frequently find that there is a condition of anæmia,—that is, poor blood. This is shown by the pallor of the face and lips. Anæmia is by far the most frequent of all the causes of the nonappearance of menstruation. Plethora—that is, just the opposite condition—may also delay the appearance of menstruation; but this is much more seldom the case.

There is another very important class of cases of delayed menstruation. I refer to cases of imperfect development of the reproductive organs, such as absence or ill-development of the uterus or ovaries, closure of the vagina, and imperforate hymen. In closure of the vagina, or imperforate hymen, there is a production of menstrual blood, which, however, is *retained* in the uterus and vagina. In such a condition a surgical operation is necessary, in order to give exit to the menstrual blood, since it goes on accumulating, and sometimes produces an enormous distension of these parts. When the womb or ovaries, or both, are imperfectly developed, we can sometimes do much good by the use of electricity. A long course of treatment is, however, usually required.

All of these cases, of course, require the attention of a physician, who should be allowed to make a thorough examination.

In the *second* class of cases—where menstruation had already been going on for some time and then stopped—we find a great many causes.

Here, too, we find an impoverished condition of the blood—anæmia—to be the most frequent cause. We

frequently find in young girls a condition termed chlorosis, — green sickness, — characterized by amenorrhœa, various nervous symptoms, anæmia, and a peculiar greenish complexion.

Imprudence during menstruation not seldom checks the flow suddenly, not to return for a number of months, and frequently only after persistent treatment. Putting on cold or damp under-clothing, or getting the feet wet during this period, is very apt to result in a stoppage of the flow. In these cases a congestion of the womb is produced, which frequently persists for a long time, and not seldom is the *starting-point* of a severe and obstinate case of womb disease. If this be so, — and there is no doubt of its truth, — we can easily see how important it is for a woman to observe the greatest care during this period.

For a sudden suppression, due to exposure to cold and wet, I would advise *immediate* treatment, as follows: Rest; hot foot-baths, with mustard, followed by hot bricks wrapped in cloths and applied to the feet; and internally one drop of tincture of aconite in a little water, repeated every half hour until three or four doses have been taken, and then every hour until three or four doses more are taken. Hot pennyroyal tea should also be drank freely; it is perfectly harmless and still effective.

Emotions, such as fright or anger may suppress menstruation, which, however, usually returns without treatment. Amenorrhœa occurs also, as a symptom of chronic disease of the uterus and ovaries.

Consumption very often causes a suppression of menstruation, even long before it is known that the individual is suffering from this horrible malady. Here, treatment directed to the womb would be utterly futile.

A married woman, well in every respect, of course suspects pregnancy whenever menstruation becomes suppressed; but it must be remembered that immediately after

marriage amenorrhœa may occur as a result of the new relations, without conception having taken place.

This condition may also occur in those who move from one country into another or travel, and a sea-voyage is particularly apt to produce it. In these cases menstruation returns without treatment in the course of two or three months, and, as a rule, there are no unpleasant symptoms.

CHAPTER IX.

MENORRHAGIA (*Excessive Menstruation*).

By menorrhagia we mean excessive menstruation. This may occur in three different forms: an unnatural profuseness of the flow, or a too long continuation of the same, or its too frequent return. The term metrorrhagia is applied to any flow of blood, whether profuse or not, during the interval between the menstrual periods.

We find a great number and variety of causes of these very common disorders. Although the result of some disease of the uterus or other organ, or of the general system, these conditions frequently give rise to other diseases, or even, in very exceptional cases, cause death.

In cases where the hemorrhage is profuse or long-continued, we usually find certain symptoms. Pallor of the face is usually pronounced; great debility, giddiness, ringing in the ears, and headache are common, while in long-continued cases we have anæmia as a result, and the long list of symptoms commonly found in this condition. Sterility sometimes seems to be due to menorrhagia.

The causes of excessive menstruation, as just said, are very numerous, and the same causes that give rise to this condition very frequently produce hemorrhage between the menstrual periods, metrorrhagia. The two conditions being so closely related, both in causation and treatment, it is convenient to consider them together.

The causes of these conditions may be divided into two great classes: first, those causes which act through the

medium of the general system, and, secondly, those which exist in the pelvic organs themselves.

Lactation (nursing) when continued for too long a period, as it frequently is by those who hope to prevent thereby a too rapid increase of the family, frequently brings on excessive menstruation, and particularly in those whose systems are naturally rather weak. Excessive or undue lactation is the cause of a number of ailments, but one of the most common is menorrhagia, which seems to be due to the poverty of the blood (anæmia), which ensues from such a constant drain.

But when lactation is continued for only six months, it may bring about this result, if an unusually large amount of milk be produced, or if the mother be very delicate or suffering from some debilitating disease at the time.

Chronic Bright's disease of the kidney not seldom produces excessive menstruation. In this case, too, the result is probably brought about by first producing anæmia.

Organic disease of the heart, especially disease of the valves, gives rise to excessive menstruation by backing the blood into the pelvic organs, and thus producing congestion of the womb. In the same way we find that disorders of the liver produce a congestion of the uterus, and, consequently, a tendency to excessive menstruation.

Malaria is sometimes a cause of menorrhagia, and I am inclined to think that it produces this trouble more frequently than the books would lead us to believe.

In acute febrile disorders, especially those accompanied by an eruption, — as scarlet fever, small-pox, measles, etc., — we sometimes find a hemorrhage from the womb, due, no doubt, to a congestion of its mucous membrane.

In many of the causes thus far enumerated we have as a result a watery condition of the blood, which seems to be the immediate cause of excessive menstruation. But we also find that the opposite condition of plethora may produce the same ultimate result, by producing a congestion of

the pelvic organs and an increased pressure in the blood-vessels.

The second class of causes — those existing in the pelvic organs themselves — are quite numerous.

By far the most common of these causes is *subinvolution* of the uterus, accompanied by small granular outgrowths on the mucous membrane lining its cavity. We have here usually great congestion of this organ, and these small granulations are very prone to bleed.

Any disease of the pelvic organs that produces congestion of the uterus is apt to cause excessive menstruation or bleeding during the intervals. One of these conditions is retroflexion of the womb. Here there is a very decided obstruction in the uterine circulation. Anterior displacements of the womb are not near so apt to produce menorrhagia as posterior displacements.

Almost any disturbance in the ovaries — congestion, inflammation, or prolapsus — is very apt to cause an increased amount of blood to be sent to the womb, and, consequently, causes an excessive flow at the menstrual period.

Ulceration of the neck of the womb, and chronic inflammation of this organ, usually have menorrhagia as a symptom.

Fibroid tumors of the womb are usually accompanied by profuse menstruation and considerable bleeding between the periods; so much so, indeed, that death is sometimes the result. Hemorrhage is really the chief danger of fibroid tumors. The bleeding is here a result of the congestion which the fibroids cause. Even quite small fibroids cause bleeding.

Habitual constipation — a very common condition among women — almost invariably produces more or less pelvic congestion. This apparently harmless condition has thus a decidedly evil influence on excessive menstruation, and must always be overcome before a cure can be established.

In cases of lacerated neck and cancer of the womb we

frequently find hemorrhage between the periods, as well as an excessive flow during menstruation. Cancer is frequently found after the change of life, and here there is bleeding at irregular intervals.

At the “change of life” the great majority of women suffer from profuse menstruation and hemorrhages at irregular periods. These hemorrhages are sometimes very profuse, and may even threaten life.

After abortion we not seldom find a retention of a small piece of adherent after-birth. This almost invariably gives rise to obstinate hemorrhage, which cannot be stopped permanently before the offending body is expelled. In abortions a physician should always be in attendance.

Treatment. — In every severe case of excessive menstruation or of hemorrhage between the periods, I would suggest that medical aid be called in time. But I shall give some directions for the management of such cases before the arrival of the physician, and also for the treatment of the milder forms.

In the first place, I should like to impress upon every woman that in all forms of this disease, *rest* — rest on the back on a hard bed — is absolutely indispensable, if we wish to check the flow. A woman who walks about can never expect to stop profuse menstruation.

Perfect quietude of mind should likewise be enjoined, and all tight clothing removed. The temperature of the room must also be attended to, and the colder this is the better. In cases where the flow is very profuse, the foot of the bed should be elevated, and all high pillows removed. This will tend to keep up a better circulation in the brain, and thus in a great measure prevent fainting.

Warm drinks and teas should be avoided. The best drink is cold lemonade or strong cinnamon tea, taken cold. Both of these have some effect on the disease, especially the latter; but such remedies should never be relied upon in any but the mildest cases.

So far as medical agents are concerned, I would call special attention to two remedies, — ergot and bromide of potassium. In cases where the flow is very profuse the fluid extract of ergot is by far the most effective remedy that I know of. It should be used in large doses, say one teaspoonful every hour, or even every half-hour, until the flow is checked, or three doses have been taken. In milder cases, half a teaspoonful, taken three times daily, will answer. In large doses it may cause some cramp-like pains, due to contraction of the womb, but these do no harm. It may be taken undiluted, or mixed with a little water. Ergot is a most valuable remedy in hemorrhage from any part of the body, since it produces a contraction of the blood-vessels. In uterine hemorrhage, however, it does more, — it produces a contraction of the womb.

When the period is not profuse, but lasts longer than usual, or returns more frequently than natural, we can again use the ergot in the dose of half a teaspoonful, repeated three times daily; or we can use bromide of potassium, thirty grains in half a wineglassful of sweetened water, repeated three or four times daily.

In every case constipation must be avoided; and in plethoric women an occasional saline purgative, as a bottle of the solution of citrate of magnesia, or some purgative mineral-water, or half an ounce of Epsom salts, is highly useful.

CHAPTER X.

DYSMENORRHŒA (*Painful Menstruation*).

THE term dysmenorrhœa is applied to pain and other unpleasant sensations occurring during or just before the menstrual period.

In a woman whose general health is good, and whose reproductive organs are normal, menstruation is not accompanied by any decided pain, although there usually is lassitude and a slight sensation of discomfort in the pelvis. Fatigue, excitement, or anxiety may increase these sensations and produce pain, which, however, is slight, and will not recur at the following period if the exciting cause be removed.

Dysmenorrhœa entails perhaps more suffering on our American women than any other single disease. Those unfortunate women who suffer from a severe form of this disease certainly enlist the deepest sympathies of the physician. It is, however, remarkable how long a woman will endure the severest suffering in this way before she seeks medical advice. This is frequently due to modesty; but too often it is owing to a popular, but, I am happy to say, erroneous, opinion that such cases are incurable.

Dysmenorrhœa was formerly looked upon as being a disease of itself, and treated as such; but we now know very well that it is but a symptom of disease. The great majority of the cases of dysmenorrhœa that we are called upon to treat are due to some disease or imperfect development of the uterus or ovaries. But we also find it very

frequently as a result of some constitutional disorder, as rheumatism or anæmia.

In many cases, although it is merely a symptom due to some underlying disorder, it is the principal cause of annoyance and discomfort, and, consequently, the patient looks upon it as being the chief ailment. Indeed, it is sometimes very difficult to convince patients of the fact that we must in some very obstinate cases resort to local treatment of the womb.

Among medical writers there is much dispute as to the different forms of this disease, or symptom, and its causes and nature. It seems pretty clear, however, that in one class of cases the pain is a form of neuralgia; that in another class, it is due to congestion of the pelvic organs; and that in still another class of cases it is caused by an obstruction to the escape of the menstrual fluid. This would, then, give us three tolerably distinct forms from a theoretical stand-point; but, practically, we usually find the different forms running into each other.

In dysmenorrhœa the pain in the pelvis, shooting down the thighs or in the back, is the chief trouble. The pain varies very greatly in the different forms of the disease. In the neuralgic form it is a sharp, shooting pain, and often there is neuralgia in other parts of the body at the same time. In the congestive form there is a dull pain occurring for some time before menstruation, which is much relieved when the flow commences. In the obstructive form the pains are spasmodic, cramp-like, and also occur before menstruation, and are much relieved when the flow is fully established. But we find spasmodic pains in many cases where there is apparently no obstruction whatever to the escape of the menstrual blood.

We have in many cases other conditions associated with these pains. Headache is frequently present; nausea and vomiting also occur quite often; while in some cases we find pain and swelling of the breasts. Cold extremities and

chilly sensations all over the body also occur. In cases where there is congestion or inflammation of the womb there are often some febrile symptoms. Where the pain is unusually intense we sometimes have delirium, or even mania or convulsions, as a result, especially if it occur during the establishment of menstruation.

As a rule we find that the more scanty the flow is the severer will be the pain. Those women who suffer habitually from very obstinate dysmenorrhœa are quite frequently sterile. But the latter is not a result of the former, both conditions being due to a common cause.

The neuralgic form of dysmenorrhœa occurs very commonly among the better classes, as a result of the habits of indolence and luxury which are there so common. A precocious development of the nervous system, or a hereditary tendency to nervous diseases, are also among the prominent causes. The same may be said of malaria, which produces neuralgia in almost every part of the body. Among the very poor women of cities, who are half-starved, we very frequently find this disease, as a result of impoverished blood, anæmia. Anæmia is a common cause of neuralgia in every part of the body.

The cases due to congestion are those where there is simply congestion, or some inflammatory disease of the uterus or ovaries. Any disease of the ovaries is very apt to produce pain during the menstrual period.

The cases where there is some obstruction to the escape of the menstrual blood are very numerous. The obstruction may consist of a congenital narrowing of the external or internal mouth of the womb, or ante flexion; or an acquired flexion forwards or backwards; or an obstruction in the servical canal, due to inflammatory swelling or spasm; or a hardening of the tissues of the neck of the womb, and, consequently, stricture, due to the too frequent application of very strong caustics; or to the presence of a tumor in the cavity of the womb.

In cases where the womb is imperfectly developed, its mouth is usually smaller than natural, and hence we have dysmenorrhœa and sterility as a result.

I repeat again, *dysmenorrhœa usually means diseases of the womb or ovaries*; and every woman who has this symptom should, if she finds no relief from such remedies as will be mentioned hereafter, consult a physician, since the diseases of the uterus, like those of any other organ, are far more amenable to treatment in their early stages than when they are fully developed. This is a very important matter and cannot be too strongly impressed.

Treatment. — We shall first consider the remedies employed for the reduction of pain during the attack; and, secondly, the means resorted to during the interval to prevent its return.

During the attack the treatment is very similar in all the different forms of the disease. A woman who is subject to pain during the menstrual period should lie down as soon as she feels the approach of pain or discomfort, and continue to rest until the period is over. At the beginning it is well to take a quite warm foot-bath, with the addition of mustard; or, what is perhaps even better, but much more troublesome, a warm hip-bath. After this she should go to bed, and be well covered with blankets.

Besides this I would strongly urge the application of what might be termed *moist heat* to the abdomen. This has a relaxing influence on the pelvic organs, relieving spasm and pain, and diminishing the congestion very remarkably. This application is best made in the following manner: —

Take an ordinary bed sheet, one that has been used for some time, so as to be soft; fold and refold this until its size is about ten by sixteen inches, or any size that can be easily applied to the abdomen. Saturate this with water, as hot as can be borne, and then wring it out sufficiently to prevent the water from running off on applying it; or,

what is still better, saturate it with warm water, wring it out, and then lay it over an open vessel containing boiling water, so that it will be saturated with steam. In this manner it can be made very warm without scalding the hands. Now apply the sheet prepared in this manner next the skin, and over it put a folded newspaper, or other paper larger than the folded sheet, and well greased with lard, but placed between two layers of linen before it is applied. The object of this paper is to keep the heat and moisture in the compress. If this be neglected such a compress wrung out of hot water will be of little benefit.

The greased paper (between two layers of any cloth) being now put on, everything must be kept in place by a bandage, not too tightly applied. Dry heat may also be of some service, but it is not near as beneficial as the moist heat applied in the manner described. So much for the treatment of dysmenorrhœa without medicine.

Quite a large number of drugs have, from time to time, been used and recommended for the relief of painful menstruation. Before mentioning any of these remedies I must, however, call attention to a very important point, and one which should never be overlooked. I refer to the possibility of women acquiring the opium, morphia, or chloral habit, if they once get into the way of regularly resorting to these agents for the relief of pain.

In ordinary cases I would say, use the hip-bath or foot-bath, and the application of moist heat, as described above, and if these do not afford sufficient relief, procure an ounce of the solution of acetate of ammonia, and as soon as the pains commence take one teaspoonful of this in a little water, and repeat the dose every hour until relieved. This acts on the skin, and is not followed by any unpleasant consequences, save some slight giddiness in exceptional cases.

In some cases compound spirits of ether (Hoffman's Anodyne) acts very well. The dose of this is a teaspoon-

ful, repeated every hour, until relieved, or four or five doses have been taken.

Bromide of sodium, in thirty-grain doses, has a sedative effect on the urinary and reproductive organs, and often produces much relief in this disease. It should be used for several days before menstruation, repeating the dose three times daily; and every two or three hours during the period until the pain stops.

When these means fail use a mixture of one fluid drachm of tincture of belladonna and two fluid ounces of paregoric, in the dose of two teaspoonfuls every half hour until relieved, or four or five doses have been taken. Shake the bottle before using. In very severe cases the dose may be doubled, but not more than two doses should then be taken.

Between the menstrual periods we must now institute a course of treatment that will, if possible, prevent a return of the attacks, or at least render the pain more tolerable.

When some disease of the womb exists, as it very frequently does, this should receive appropriate treatment.

When the patient has had fever and ague, or malarial fever in any of its forms, it is well to use quinine or cinchonidia. When there is anæmia — poor blood, as shown by pallor of the face, etc. — iron should be used.

In short, all known causes should be removed, and the general health improved as much as possible. As the general health improves the dysmenorrhœa usually becomes milder, even though there be a local cause.

Plenty of exercise in the fresh air, avoidance of sedentary occupations, wholesome diet, good warm clothing in the winter, and particularly the use of a sponge bath with cold salt water every morning, followed by frictions with a coarse towel or flesh-brush, all tend very greatly to improve the general health, and decidedly diminish the pain during the menstrual periods.

CHAPTER XI.

LEUCORRHŒA (*The Whites*).

THE term "leucorrhœa" is applied to all discharges from the female reproductive organs not consisting of blood. The color of such discharges is usually white, and hence they are popularly known as "the whites."

In a state of health the mucous membrane lining the womb and vagina secretes an amount of mucus sufficient for the lubrication of these parts, but usually no more. Consequently, a healthy woman has no discharge from the vagina.

The whites may, however, occur physiologically, so to speak. In pregnancy, especially during the latter months, women are usually troubled, more or less, with a whitish discharge, which cannot be looked upon as a condition of disease unless it be unusually profuse. Then, too, we find that very many perfectly healthy women notice a slight whitish discharge shortly before, but more particularly after, menstruation.

But when we find ordinary leucorrhœa at any other time it indicates disease either of the reproductive organs themselves or of the general system; but more commonly the former. Leucorrhœa, then, is, as a rule, merely a symptom, and not a disease of itself.

The leucorrhœal discharge consists principally of mucus with epithelial and other cells. Its color varies greatly, being usually either white or perfectly transparent like the white of an egg, or greenish or brownish, or even slightly reddish, from the admixture of blood.

The discharge which so closely resembles the white of an unboiled egg always comes from the neck of the womb, and always indicates an inflammation of that part. A rust-colored discharge usually comes from the cavity of the body of the womb, while an opaque whitish discharge is most commonly produced by the vagina. If we wish to indicate the origin of the discharge by its name we use the terms “uterine leucorrhœa” and “vaginal leucorrhœa.”

Leucorrhœa is, perhaps, the most common of all female disorders. It is very unpleasant, and debilitates the system by constantly drawing important elements from the blood. Leucorrhœa, from whatever cause, if profuse, produces anæmia and disorders of the digestive organs. Sterility is also quite frequently dependent upon a leucorrhœal discharge, in which case a cure can usually be established. A very annoying itching of the external genitals is sometimes produced in cases of leucorrhœa where the discharges are irritating.

The *causes* of leucorrhœa may be either local or constitutional. Scrofula, and the scrofulous diathesis, strongly predispose to, and frequently produce, leucorrhœa, sometimes in a very inveterate form. Anæmia also predisposes very strongly to leucorrhœa. In fact, the great majority of anæmic women suffer from this disorder.

If anæmia (an impoverished condition of the blood) causes leucorrhœa, we can easily understand that the long list of causes of this condition must also give rise to “the whites.” Prominent among these is prolonged lactation. This certainly weakens the system, produces a condition of anæmia, and, consequently, a number of unpleasant symptoms.

Excessive menstruation acts in a similar manner. Leucorrhœa is very frequently found as a result of too frequent or too profuse menstruation. Disorders of the digestive organs, commonly designated “dyspepsia,” are almost invariably accompanied by “the whites.”

Habits of indolence and luxury; work in ill-ventilated and warm rooms; late hours; soft-beds, residence in damp locations or warm climate; over-indulgence in the pleasures of the table, etc., all tend to bring about this ailment. The same may be said of working near a hot stove, or ironing. The heat seems to have a very relaxing effect on the system. Running the sewing-machine for any great length of time certainly aggravates, if it does not produce, "the whites."

Organic disease of the heart or obstruction in the liver are apt to cause leucorrhœa by producing pelvic congestion. The same may be said of constipation.

The local causes of leucorrhœa are many, since almost all the diseases of the uterus and vagina are accompanied by it. It is, however, particularly common in subinvolution of the womb, and in chronic inflammation of its mucous membrane it is always present. Ulceration and laceration of the neck of the womb are often accompanied by a thick yellowish discharge. Any disease or displacement of the womb that produces congestion will have leucorrhœa as one of its symptoms. Such is the case, for example, with retroflexion or prolapsus (falling) of the womb.

Treatment. — We must remember that leucorrhœa is usually a symptom depending upon some constitutional disorder or disease of the womb or vagina.

In the treatment of this disorder a great deal depends upon strict attention to certain hygienic matters. Bathing in cold water, for example, is quite useful in giving strength to the relaxed tissues of the pelvic organs. The hip-bath — sitting in a bath-tub, or even ordinary tub, containing about ten or twelve inches of cold water — is, perhaps, the best form to be used in this disorder. The warm-bath I would not advise, except for purposes of cleanliness to those who cannot use the cold-bath, and then only for a few minutes.

Vaginal injections of cold water should be used regularly twice daily, not only for cleanliness, but also for the as-

tringent action which they have on the mucous membrane of the vagina and uterus.

Sponging the body several times daily with cold water containing about two table-spoonfuls of common salt to the pint, followed by frictions with a coarse towel until the skin glows, is usually the most convenient and the most effective form of the bath. In scrofulous cases, especially, this should never be neglected. In delicate girls it is also extremely useful, since it acts as a powerful tonic to the entire system.

Plenty of exercise in the open air is very important. "Early to bed and early to rise" is here a good maxim, and should always be obeyed as far as practicable.

A woman who is desirous of checking "the whites" dare not run the sewing-machine to any extent; nor is it well to do any ironing or cooking, since the heat of the stove has a decidedly injurious effect.

Since there is usually a condition of anæmia in this disorder, as is shown by the pallor of the face and lips, it is very important to eat plenty of easily digestible and nutritious food. For this purpose milk stands preëminent, and it is always well to make free use of it, if the tastes of the patient are at all in its favor. Eggs and oysters, raw or stewed, have similar qualities; but all highly-seasoned articles of food and spices should be avoided. Alcoholic stimulants, as a rule, do harm, though it must be admitted that in exceptional cases they do good.

Iron, in a hundred different forms, has been employed from time immemorial in the treatment of leucorrhœa. In cases where there is anæmia (and this is the rule), it is very frequently of benefit. Many of the preparations of iron ordinarily used are very unpleasant, but the following prescription, much used by Dr. Godell, makes a very pleasant mixture:—

Take of muriated tincture of iron, 2 fluid drachms; dilute phosphoric acid, 3 fluid drachms; spts. of lemon, 1 fluid

drachm; syrup, $2\frac{1}{2}$ fluid ounces; water enough for 6 fluid ounces. Mix. Dose. — One table-spoonful after each meal.

I give the above prescription because it is a very useful remedy in this condition, and is quite palatable.

There are some remedies which have a special effect upon the secretions from mucous membranes. Of these, although there are many, I will mention but two, which are perfectly harmless, and often quite effective remedies.

The first is tincture of cubebs, — a rather pleasant medicine, its only objection being that sometimes it disturbs the digestive organs when given in very large doses. The dose of this is one teaspoonful taken in a little water, after each meal, gradually increasing this amount to two teaspoonfuls, or even more if the stomach does not become deranged.

The other is fluid extract of eucalyptus. The dose of this is one teaspoonful, taken in water three times daily, and preferably after meals.

In all cases constipation, if present, must be overcome, since it always tends to keep up congestion of the womb. The management of constipation will be considered in detail later on, under the general treatment of Chronic Inflammation of the Womb. At the same place will be found some remarks on the use of vaginal injections, which are frequently of great benefit in leucorrhœa, and should always be used.

Of the various injections usually employed a solution of alum is one of the best, it being a most excellent astringent, and, besides, possesses the valuable property of not staining the body linen. The ordinary strength employed is one teaspoonful of powdered alum to a pint of cold water. This amount should be used every morning and evening.

Another equally good astringent injection is made by dissolving half a drachm or a drachm of tannic acid in a pint of water. From time to time the injections should be

varied, since in this way we obtain better results than by using the same remedy continually. One drachm of sugar of lead to a pint of water also makes a very good injection. When any of these injections produce smarting dilute with water until this is overcome, or else add a teaspoonful of laudanum to the pint of solution.

Although I have thus far recommended cold water, I must now state what may seem a paradox, namely, that injections of hot water have a similar effect. *Hot* water, as hot as it can be borne, produces a contraction of the blood-vessels just as cold water does, and, consequently, relieves the congestion, and also leucorrhœal discharges resulting therefrom. Warm water, however, seems rather to increase congestion. The use of hot water injections will be discussed more in detail in the chapter on Chronic Inflammation of the Womb.

Leucorrhœa in Children. — Although we find leucorrhœa usually in adult women, during the period of sexual activity, it is sometimes found in children.

In these cases we usually find one of two causes. Either there is a scrofulous diathesis, or else there are worms in the lower bowel. These discharges may lead to bad habits, and should receive attention as soon as noticed.

In all cases wash the parts several times daily with cold water, and then apply with a soft sponge a solution of alum or sugar of lead made by dissolving a drachm of either in a pint of water. If the child is scrofulous cod-liver-oil should be used. If worms are suspected, give some reliable vermifuge.

CHAPTER XII.

CHRONIC CONGESTION AND INFLAMMATION OF THE WOMB.

THE term "womb disease" is almost synonymous with chronic congestion and inflammation of the womb, since in the great majority of the cases of chronic disease of this organ we find that congestion and inflammation play the principal part. It is true that we frequently have flexions and other displacements of the womb, and disease of the ovaries; but these are as a rule either the cause or result of congestion of the uterus. A displacement of the womb that for some reason or other does not cause congestion usually produces no annoyance.

Sometimes the inflammation affects principally the neck of the womb, and this is by far the more common form. At other times it affects the entire organ. When there is inflammation of any part of the womb the whole organ is congested. We may, however, have congestion of the uterus and still no inflammation.

To describe the nature, causes, and symptoms of chronic inflammation and congestion of the womb would be to repeat, in the main, what was said in the chapters on the nature, causes, and symptoms of womb disease in general. I shall, therefore, refer the reader to those chapters in the fore part of the book.

Many of my readers will now ask: "How can I know that I have an inflammation or congestion of my womb?" My answer is that if you have a fair proportion of the principal symptoms mentioned in the chapter on the Symptoms

of Womb Disease, you can rest assured that your womb is congested or inflamed; while if you have none of those symptoms, you can feel equally certain that you are not suffering from any disease of the womb. Or, to be a little more clear, if you have leucorrhœa, pain in the back on the least exertion, dyspepsia, pain during menstruation, palpitation of the heart and headache, you have congestion or inflammation of the womb.

One word more to avoid obscurity. Congestion may exist without inflammation, or there may also be inflammation of the womb. Simple congestion is the milder disease of the two, but the causes, symptoms, and treatment of the two conditions are practically the same.

In some cases there is an inflammation of the mucous membrane of the womb; in others we have in addition an erosion, or, as it is often called, an “ulceration” of the mouth of the womb, produced by acrid discharges; or we may find the neck of the womb lacerated on one or both sides, and the raw edges separated and angry-looking. This last condition is frequently mistaken for simple “ulceration.” It may remain unhealed for many years, but it should never be neglected, since it may be the starting-point of cancer. It must also be remembered that in married women the majority of cases of inflammation of the uterus have their origin in subinvolution following labor or an abortion.

Those of my readers who are suffering from these diseases will be anxious to know whether they are curable. To these I would say, that by strictly carrying out the treatment herein described the majority of cases may be either cured or much relieved. But this book is not intended to do away with physicians; but it is hoped that it will assist them. I would say, therefore, let all those who are able to undergo a course of systematic treatment from a physician do so by all means, selecting one that is well qualified, since to treat such cases successfully requires a

great deal of experience and skill, which the general practitioner too often lacks.

Treatment. — I shall now consider the management of chronic congestion and inflammation of the womb, giving first its general treatment, hygienic and medical, then the treatment of the most prominent symptoms or sympathetic diseases, and, finally, its local treatment.

Rest and Exercise. — Different cases of uterine disease vary greatly as to the amount of exercise that can be taken with advantage. We meet two classes of patients. We have, on the one hand, the poor, working-class, who daily perform hard labor, often in spite of almost intolerable pain; and, on the other hand, those who, owing to fortune or necessity, do almost no work and take little or no exercise. The amount of exercise that is most beneficial depends in a great measure on the sensations of the patient. To those patients who are not in the habit of working or exercising this is, of course, advisable. Work is always better than simply exercising in an apparently useless manner for the sake of health. It gives the patient a feeling of usefulness, and prevents the mind from brooding over her ailments. Walking and rowing are very good exercise. Riding on horseback is frequently injurious, and is usually not advisable, since the womb is considerably jarred, thereby and is apt to become displaced.

It must be remembered that a woman cannot be cured of womb disease while she performs hard work. But we must also guard against invalidism. In cases where all work is impossible, it is well to commence systematic exercise with dumb-bells, and continue by rowing or walking, and gradually increasing the amount as the case will permit.

It is very important to retire in good time and rise early in the morning, and take some kind of exercise, such as walking before breakfast. To stay up until late in the evening, and then get up late in the morning, is a very bad practice for those suffering from any womb disease.

Rest during the menstrual period is a very essential matter in diseases of the womb, and should be enjoined in every case. Even in a state of health none but the lightest work should be done during this time. It is difficult to convince women that any good results from this; but it is really quite an important matter.

Change of scene and circumstances, such as is produced by travelling and residence at some quiet watering-place or mountain home, frequently has a good effect, particularly on the mind. The *diet* is also a matter of no little importance in these cases. The system is broken down, and must be built up. Digestion is deranged, the appetite usually poor, and what little food is taken is frequently of such a nature that it will be digested with difficulty. Plenty of easily digestible and nutritious food should be eaten. Pork would better be avoided altogether. Spices, all highly-seasoned dishes, cakes, and all articles in the line of pastry, should not be used. Alcoholic stimulants are not advisable as a rule; usually they do more harm than good, but sometimes they seem to have a good effect.

Rare beef, fowl, eggs, oysters, milk, bread, and vegetables should constitute the principal diet. But milk is especially well suited to these cases, since it is so easily digested and still very nourishing. It would be well to drink a pint of it three or four times daily in addition to the regular meals. Tea and coffee may be used in moderation by those who find it difficult do without them, but otherwise they are better avoided entirely.

Baths of various kinds, although not curative, are very useful in the treatment of chronic diseases of the womb. They are too often entirely neglected by patients, — except for purposes of cleanliness, — because they are considered “too troublesome to bother with.” But a woman who has a chronic inflammation of the womb *must* attend to many apparently trifling matters if she desires to obtain permanent relief. I repeat, baths are decidedly useful and **must never be neglected.**

The *warm* or tepid bath is not of much benefit in uterine diseases, and if used too freely it has a relaxing effect on the system, — just the opposite of what is desirable. But the warm or hot hip-bath (sitz-bath) is very useful in cases of suppression of menstruation due to cold, wet feet, etc. ; also in that form of dysmenorrhœa where there is severe pain before the appearance of the flow.

The *cold hip-bath*, however, is very effective in the treatment of chronic congestion of the womb and other pelvic organs. This form of bath should be continued for months, using it twice daily, remaining in it for but a minute or two at first, and gradually increasing the time to fifteen minutes. The water should not be too cold at first, but afterwards brought to the proper temperature by the addition of cold water.

A hip-bath can be taken in an ordinary bath-tub, or in the tin vessels made for that purpose, or even in a common washing-tub. There should be sufficient water in the vessel to come up to the patient's hips after she is seated. If she remains in the bath for more than a minute or two, a blanket should be thrown over her shoulders. After coming out of the bath, the lower extremities should be immediately dried and well rubbed with a towel. The efficacy of the bath may be increased by the addition of a good handful of common salt.

A *general bath of cold water* is a powerful tonic and lessens the sensibility of the nervous system. When there are no acute symptoms the cold bath should always be used, and will, as a rule, be found very invigorating. The temperature of the cold bath must be regulated by the sensibility of the patient and the season of the year. During the summer it is most agreeable when used quite cold. During the winter it is best to have it not quite so cold, and the bath-room should always be warm, if possible. When the room is warm a cold bath can be taken with pleasure in the middle of winter ; but when the room is cold it is very

disagreeable. After coming out of the bath, frictions should be used to promote reaction — to bring the blood to the skin again. The general bath acts more as a tonic to the system at large than to the pelvic organs.

Shower-baths of cold water are also very invigorating, but are not well suited for the winter, especially in the case of very delicate females, who do not always have reaction follow promptly. They are best suited for the summer.

The cold sponge-bath is the most convenient of all the various forms of cold bath. It is very useful as a general tonic, and, like the other cold baths, protects the system in a great measure from attacks of “cold.” It also possesses the advantage of being more generally applicable, since it may be used by those who do not have the convenience of a bath-tub.

After using the sponge-bath frictions with a coarse towel should be used until the skin glows, just as is done after any other form of the cold-bath. One point of great importance in connection with the sponge-bath is the addition of a handful of salt to each bath. It increases its efficacy as a tonic very decidedly. Why this is I am not prepared to say.

Dress. — The dress of those suffering from chronic womb disease should be so arranged as to avoid all compression of the waist and chest. If we are 'to breathe freely the chest dare not be compressed, and breathing is a very important function. Superficial or insufficient breathing causes a number of troubles through the imperfect aeration of the blood which ensues.

But a constriction of the waist impedes the free circulation of the blood, and thus causes pelvic congestion, or aggravates it when produced by some other cause. It also presses the womb down lower in the pelvis, and increases preëxisting displacements, such as anteflexion (the womb bent forwards), retroflexion (the womb bent backwards), or “falling” of the womb.

All tight-lacing being injurious *must* be avoided if we wish to cure a case of chronic inflammation of the womb. "But how are the skirts to be supported?" will be asked by some. One very good way of doing this is to have them fastened to broad suspenders, which come over the shoulders and are crossed in *front*, in order to avoid pressure on the breasts.

The general treatment of this disease by means of *medicine* resolves itself practically into the use of two classes of remedies: 1. Those drugs which lessen the amount of blood in the uterus. 2. Tonics.

The first class includes a number of remedies; but the most important ones are ergot and nux vomica. Ergot, as is well known, produces a contraction of the womb, and, consequently, diminishes the amount of blood circulating in it. It should, therefore, be of great value in treating congestion of this organ, and this we really find to be so in cases following labor or miscarriage — cases of subinvolution. In very chronic cases, however, it is not near as useful. The fluid extract of ergot is the form usually employed, and the dose is one-half to one teaspoonful in water, repeated three times daily, and preferably taken after meals. It should be continued until cramplike pains occur in the pelvis, showing that it causes decided contractions of the womb. It should then be suspended for a while, and afterwards again resumed, taking smaller doses, say twenty drops thrice daily.

The tincture of nux vomica acts in a manner similar to ergot, only not near as powerful. The dose is from five to fifteen drops, to be repeated three times daily. Begin with a small dose and gradually increase to the largest dose.

The *tonics* that may be employed with advantage in chronic womb diseases are very numerous, but I consider nux vomica more generally useful than any other. It has a very excellent effect on the stomach, improves the appetite, invigorates the entire system, and, as said before,

relieves congestion of the womb. Possessing all these properties, nux vomica is certainly a most valuable medicine. I use it a great deal in my practice, and the more I use it the more I become convinced of its great value. I would advise every woman who suffers from chronic womb disease to use nux vomica in some form or other. It is of course a powerful medicine, and must be used with *caution*. More than fifteen drops, three times daily, should not be taken; and it must, of course, be kept out of the reach of children. If it produces twitching of the muscles, quit taking it for a short time, and afterwards continue its use in diminished doses.

Its taste is rather bitter and I know of nothing that will disguise it completely, but the following mixture is tolerably palatable: Take of tincture of nux vomica eighty minims; fluid extract of licorice, one fluid ounce; compound syrup of sarsaparilla, enough to make two fluid ounces. Mix. Dose: one teaspoonful containing ten drops of tincture of nux vomica.

Quinine is also a most excellent tonic in spite of the prejudices of many of the laity against it. It is best taken in the form of two-grain quinine pills — one after each meal. Never use the sugar-coated pills, since they are frequently quite hard, and, therefore, insoluble, even if honestly made. Always use pills freshly prepared by the druggist. Before commencing the use of quinine, take six grains of blue mass in the evening, followed by a seidlitz-powder in the morning. When the liver is acted upon in this manner, the system is much better prepared for the action of this medicine.

In those cases where there is anæmia, shown by the pallor of the face, iron in some form will be found useful. There are many different preparations of iron, but the one I like best, because it is quite palatable and still effective, is that given on page 66.

Some of the symptoms or sympathetic disorders of womb

disease require special treatment. Among these *dyspepsia* is by far the most common. It occurs in every imaginable form, and the remedies which in a similar form of the disease due to any other cause would effect a cure, are much less satisfactory here since the cause will continually keep up the disorder.

In the ordinary form, where there is a feeling of weight in the stomach, and accumulation of gases producing an enlargement of the abdomen, which often renders it necessary to loosen the clothing, *nux vomica*, administered as just mentioned, is usually very effective. Or we may use an infusion of gentian, made by pouring a pint of boiling water on one ounce of the ground root. When cold take a wineglassful before each meal.

Sometimes one or two drops of Fowler's solution of arsenic, taken in a little water after each meal, have a very excellent effect.

The diet should, of course, consist of easily digestible food, and not more should be eaten than the stomach is able to digest. In this matter the experience of the patient is the best guide.

In some cases there is a dilatation of the stomach, as is shown by a gurgling sound being produced by percussing over the region of the stomach. These cases are sometimes incurable except by using the stomach-tube, by means of which the sour undigested food and mucus are removed and the organ washed out. At the Clinic of Dr. Oser, of Vienna, I saw most excellent results from this treatment, and I have used it sufficiently in my own practice to be convinced of its great efficacy.

In some cases of *dyspepsia* due to uterine disorders we have few or almost no symptoms save pain in the stomach, which is sometimes very severe. When this is the case take a table-spoonful of paregoric in water. One drop of Fowler's solution of arsenic, taken in a little water after each meal for several weeks, usually prevents a return of this pain.

Palpitation of the heart, a very annoying symptom, is often so bad as to lead the sufferer to believe that she is the subject of heart disease, while it is merely a nervous condition that will be well as soon as the womb is restored to health. Accumulation of wind in the stomach is often the immediate cause of this condition, and digestion should, therefore, be particularly well cared for in all such cases. All excitement, running upstairs, or after street cars, etc., must be avoided.

If all these directions have been followed, and the palpitation is still troublesome, it is well to use the following, which is usually quite effective:

Take of bromide of potassium, 5 drachms; tincture of belladonna, $1\frac{1}{2}$ fluid drachms; water enough for 2 fluid ounces. Mix. Dose: one teaspoonful in half a wine-glassful of sweetened water, after each meal.

Besides this, it is well to apply a ready-made belladonna plaster, six inches square, over the region of the heart. This can be obtained from any druggist. It must be gently warmed before applying, in order to make it adhere. It is usually allowed to remain until it comes off of its own accord.

In some cases of chronic inflammation of the womb the patient is very *nervous*. This sometimes calls for bromide of sodium, the great woman's medicine. Nothing quiets the nervous system of a woman as nicely as this. Have the druggist prepare a number of 30-grain powders of this medicine, and take one, dissolved in a little sweetened water, two or three times daily. It is not at all injurious, and usually very effective.

For the nervous *headaches* occurring in these cases, one of the above powders may be taken, and very often relief will follow. Sometimes two drops of tincture of aconite root in water, every half hour, until the pain is relieved, or three doses have been taken, will give satisfactory results.

That common symptom, *backache*, is frequently relieved

by a belladonna plaster (6 by 10 inches) applied to the seat of pain ; but very often nothing will relieve it until the womb is restored to health, when it will disappear of its own accord.

Constipation. — The majority of cases of chronic inflammation of the womb are accompanied by constipation. This keeps up a congestion of the pelvic organs, and, consequently, when not attended to, interferes very greatly with the cure of chronic womb troubles ; indeed, it does more harm than almost any other condition. It is usually looked upon as a trifling matter, but it is really very important, and should always receive careful attention.

In the treatment of this condition, exercise in the open air is essential, and a sedentary life should be avoided as far as possible.

Certain articles of diet are very beneficial in constipation. These are Graham bread, oatmeal, and all fruits, berries, and vegetables. Apples, eaten with the rind, prunes, and figs are very useful. The same may be said of various seeds, such as white mustard-seeds (unground), grains of wheat, etc. These articles act as irritants to the bowels, and thus overcome the constipation.

Kneading the abdomen is also sometimes useful. Drinking a glass of cold water on retiring in the evening, and repeating the same on getting up in the morning, sometimes does much good and is always worth trying.

But by far the most important point in the treatment of constipation is this — always *visit the water-closet regularly every day at a fixed hour* ; and never neglect to do this because it may seem inconvenient, or because you have company, or are away from home. It is not well to make any great effort, else piles may result.

So far as the use of pills, salts, and other cathartics are concerned, I would say, avoid them as much as possible, since they do much more harm than good. When their immediate effect is over, the bowels are more costive than ever,

—they are weakened. Whoever uses ordinary cathartic pills regularly for some time becomes a slave to pills, and is compelled to use them.

The following pills, however, are very useful in constipation; they do not physic, but simply produce a natural passage, and give tone to the bowels: —

Take of aloes, twelve grains; solid extract of nux vomica, and solid extract of belladonna, of each six grains; mucilage of acacia, a sufficient quantity. Mix, and divide into twenty-four pills.

Take one pill every evening on retiring, and usually it will produce a natural passage in the morning. Sometimes two of these pills are necessary at a dose; but more than two should never be taken at one time. These pills also possess the advantage of not griping.

The use of an injection of cold or tepid water into the bowel at a fixed hour every day, for five or six days, until the habit is established, is a good remedy.

Hemorrhoids (piles) are sometimes found in connection with chronic inflammation of the womb. The most important thing here is to keep the bowels open, and there will usually be no trouble. The pills mentioned above act very well in these cases, and are always advisable.

Itching of the external genitals. — This is sometimes a most annoying symptom. One of the very best remedies for this trouble is an infusion made from ordinary tobacco leaves, used as a vaginal injection and external application. This cheap and effective remedy should always be tried first.

The following is also very good: Take of sugar of lead, one-half drachm; carbolic acid, ten minims; tincture of opium, one-half fluid ounce; water enough for one pint. Mix. Use as an injection and external application.

LOCAL TREATMENT.

The local treatment of chronic inflammation of the womb as practised by physicians, consists of the application of

remedies — and they are almost innumerable — to the interior of the womb. This is what so many patients call “an operation,” although there is no cutting whatever connected with the procedure.

These applications, when properly made, are usually very useful, and one is amply paid for all the trouble and annoyance which they may cause.

Pessaries (internal supporters) are sometimes used in cases where the womb is displaced. When the womb is not too sensitive, they are very useful indeed, and sometimes produce almost marvellous results. But, in the majority of cases, it requires much patience, good judgment, and considerable practice to apply a pessary properly.

The local treatment, which the patient should carry out herself, consists chiefly of vaginal injections and irrigations.

Vaginal injections. — Every married woman, whether suffering from disease or not, should possess an ordinary female syringe. A healthy woman should use it, for purposes of cleanliness, at least once or twice a week, using cold water in the summer and tepid water in the winter. Those suffering from womb disease should use it not only for cleanliness, but also for the purpose of applying various medicinal agents to the vagina and lower part of the womb.

First, then, as to the *kind of syringe* to be used for vaginal injections. The small glass or hard-rubber vaginal syringes, with a piston, are entirely useless for purposes of cleanliness, and, with one exception, to be mentioned hereafter, they are of little use in the treatment of disease. The syringe which is ordinarily sold by druggists, under the general name of “female syringe,” consists of a hollow rubber-ball, placed in the middle of a soft rubber-tube, with valves at the junctions, and a nozzle of metal or hard rubber at one end.

There is a great variety of these syringes, exactly the same in principle, but differing in name, quality of rubber, and price. The Davidson’s syringe is a very reliable one,

but there are others which are less expensive and answer every purpose. Hall's syringe, which consists of a rubber ball placed on a bottle, from which runs a rubber tube, is a very excellent syringe, and remarkably convenient for the use of astringent injections.

It is always best to have a syringe with the perforations all around the tip of the nozzle, but none in the centre, since a jet of water, coming out of the very point of the nozzle, is more apt to pass into the womb, if its mouth be very patulous than those coming out at the side. When hot water is to be used it is always best to have the nozzle of hard rubber, or any other material not metallic, since a nozzle of metal would, in this case, become uncomfortably hot. When the valves of a syringe become lost ordinary bird-shot can usually be used instead. After long use, the rubber tubing not seldom cracks at the points of junction with the metal. This may be remedied by cutting off the torn part and then fastening the tube again by winding a strong cord tightly around it.

When vaginal irrigations of large quantities of hot water are to be used the above syringes are not suitable. In these cases the "fountain syringe" answers admirably. This consists of a large sac made of soft rubber, to which is attached a long, flexible tube of the same material, having at the end a metallic or hard-rubber vaginal nozzle. The sac is filled with the injecting fluid, and suspended a short distance above the patient, when the liquid will flow by gravity, without any effort on her part.

For purposes of cleanliness, then, I would advise the use of an ordinary Davidson's or any similar syringe, or, what is more convenient still, Hall's syringe. For this purpose use simple water, either tepid or cool. During the menstrual period injections should, of course, not be used.

The manner of using these syringes is quite simple. The end of the tube is put into the water or solution used for injecting; the bulb is then alternately compressed and

relaxed until all the air is removed and a continuous stream issues from the nozzle. The patient is now seated over an ordinary chamber-vessel, with a basin containing the injecting fluid placed in front, the nozzle is gently passed into the vagina and the bulb of the syringe worked until all the fluid has been injected.

The principal medical agent used in the form of injections in the treatment of chronic inflammation of the womb and vagina are the various *astringents*. Astringents, in the first place, coagulate the mucus and pus existing in the vagina, and then act on the tissues, producing a "shrinking" effect. They produce a contraction of the blood-vessels, and thus relieve congestion and diminish secretion. It will be seen, then, that astringent injections are of decided benefit in the treatment of chronic congestion and inflammation of these organs.

The most suitable astringents are alum and tannic acid. It is usually well to commence with a solution of alum, say one teaspoonful to the pint of water. This should be preceded by the use of simple water for the purpose of removing all discharges, and thus enable the astringent solution to come in direct contact with the diseased tissues.

These injections are ordinarily used once or twice daily, but the frequency of repetition should depend rather upon the effect produced. They should be repeated twice daily until the discharges are checked, and afterwards only when they return. Different cases vary greatly in this respect; but usually, after an astringent injection is used for a few days or a week, it is necessary to repeat it only once a day or every two days. When astringent injections are used too frequently they produce an injurious effect. It is well not to use any one form of injection too long, but change off every week, since astringents are much less effective after having been used for some time than at first.

A drachm of alum, tannic acid, sugar of lead, borax, or iron alum; or half a drachm of sulphate of zinc (white

vitriol), or sulphate of copper (blue vitriol), to the pint of water are all good astringent injections.

In severe cases, especially where there is a great deal of discharge, it is best to use, first, simple water as an injection to cleanse the parts, and then apply any of the following lotions: Dissolve two drachms of tannic acid, or one-half drachm of sulphate of copper (blue vitriol), or one drachm of sulphate of zinc (white vitriol), in half a pint of water.

To apply any of the above lotions take a hard rubber or celluloid (not glass) vaginal syringe worked with a piston and holding about an ounce and a half; fill it with the lotion, and, after having used an injection of tepid water, lie on the back, introduce the syringe, and gently push in the piston. In about ten minutes get up, and allow the lotion to run into any suitable receptacle.

Vaginal irrigations of hot water. — The injection of astringent solutions, as recommended above, is quite useful in the treatment of chronic inflammation of the womb, but by far the most effective local remedy that the patient can employ herself for the relief of these diseases, consists of irrigating the vagina with large quantities of *hot* (not warm) water.

Hot water, when applied for some length of time, produces a contraction of the blood-vessels more effectually than any other agent applicable in the treatment of these cases, and, consequently, is the best remedy for congestion and inflammation of the womb and other pelvic organs.

Dr. Emmet, of New York, who has made some most important contributions to gynæcology, was the first to recommend the systematic use of large quantities of hot water in these cases, and to teach us how to use it effectually.

He says in his very original work, “The Principles and Practice of Gynæcology:” “This remedy is not to be considered a ‘cure-all,’ but one of the most valuable adjuvants, under all circumstances, to other means. Yet, so beneficial is it, except in displacements of the uterus, that I believe

more can be accomplished in the treatment of the diseases of women by its use, and a carefully regulated plan of general treatment, than by all other means combined."

In using vaginal irrigations of hot water, it is absolutely necessary for the patient, if she desires to obtain their full benefit, to occupy the *recumbent position on the back, with the hips elevated*. It is also important to continue the irrigations for a considerable time, say fifteen or twenty minutes, using at least several quarts, but preferably a gallon or two of water. The water must be *hot*, as hot as can be borne.

Davidson's, and other similar syringes, are not suitable here, since the patient cannot work them herself, and even to an assistant they are very tiresome, since they have to be worked for some time. Most patients, moreover, prefer to do without assistants at such times.

In these cases the "fountain syringe," already described, of the largest capacity (two quarts), with a *hard rubber nozzle*, answers admirably. It can be obtained from the manufacturers' through any druggist.

An ordinary wooden bucket, or small tub, with a spigot put in near the bottom, and to this a rubber tube attached, ending in a hard rubber vaginal nozzle, may also be used.

The manner of using the irrigations of hot water is so clearly described by Thomas, in his excellent treatise on the Diseases of Women, that I cannot help quoting it for the benefit of my readers.

He says: "The patient places a pillow upon the edge of her bed, and an empty tub upon the floor under it. She then covers the pillow by a piece of India-rubber cloth, which drapes into the tub. Then, putting two chairs one on each side and a little in front of the tub; she places a small table in front of these, and upon this another chair. Upon the chair which stands on the table, a tub containing about two gallons of hot water is now put, near the bottom of which has been inserted a spigot to which a long rubber

tube is affixed, which ends in a vaginal nozzle. The patient now lies upon the bed, the pelvis elevated by the pillow, places her feet upon the chair, covers her limbs with a shawl or blanket, touches the spring — an ordinary clothes-pin makes a good one — which controls the flow, and the water bathes the vagina, and, running out, is conducted by the India-rubber cloth into the tub.

“Here, the only articles purchased are the tub with the spigot and tube attached, and a yard of India-rubber cloth, which are inexpensive. The patient will have everything else in her chamber, and very little trouble attaches to the method, which is certainly an efficient one.”

CHAPTER XIII.

FALLING OF THE WOMB.

THIS is a very common disorder, and occurs most frequently in those who do hard work. Whatever enlarges the womb, and, therefore, makes it heavier, — such as tumors or inflammation, — tends to cause a falling of the organ. And whatever weakens the supports of the womb, causes it to sag, even if its size and weight be normal.

Falling of the womb occurs in different degrees, sometimes being slight, while at other times the womb comes partly or entirely out of the body.

The great predisposing cause of this disease is child-bearing, since the various accidents connected therewith — such as a tear in the neck of the womb and in the perinæum — tend to cause enlargement of the uterus and weaken its supports. Women who bear many children frequently have this disease; single women rarely suffer from it. Leucorrhœa, when profuse and long-continued, seems to relax the uterine supports, and bring on a falling of the organ. Washing and ironing, when done a great deal, frequently produce this trouble. It is especially apt to occur late in life.

Falling of the womb often renders a woman unfit for work. Usually there is some disease of the uterus, such as inflammation and ulceration.

The symptoms of falling of the womb are usually quite similar to those produced by other chronic diseases of this organ.

To those suffering from falling of the womb I would say: Always walk erect, since the stooping position tends

to allow the bowels to fall into the pelvis and increase the trouble.

Use frequent injections of cold water containing a teaspoonful of powdered alum or tannic acid to the pint. This will check the whites, and decidedly strengthen the supports of the womb.

Always rest during the menstrual period. Avoid all tight clothing around the waist, and use a skirt-supporter. The use of the skirt-supporter is a very important matter.

If there is any other disease of the womb have it treated. Avoid all hard work and especially those occupations requiring much standing.

It is in this disease that pessaries (internal supporters) are of most service, and sometimes they really achieve wonders. They can, of course, be applied only by a physician. To apply a proper pessary in a case of falling of the womb usually requires considerable skill. It is for this reason that the general practitioner, who does not have constant practice in this work, so frequently becomes disgusted with pessaries, and considers them useless. I would rather not treat displacements of the womb at all if I were compelled to dispense with pessaries.

Laceration of the perinæum (the tissues between the vagina and the lower bowel), either partial or complete, produced during labor, is, as stated before, one of the causes of falling of the womb, indeed it is the most fertile of all the causes of this trouble. The perinæum being torn offers little or no support to the vagina, which now becomes relaxed and prolapsed, and instead of supporting the womb, as it naturally does, pulls upon it, and thus falling of the womb is brought about.

In these cases nothing short of an operation will effect a cure. This consists in freshening the torn surfaces, which are healed over, and bringing the parts together by sutures of silk or fine silver wire. This is usually a very successful operation, and, if so, gives great relief.

CHAPTER XIV.

CANCER OF THE WOMB.

CANCER of the womb is a very loathsome disease, and a lengthy description of it would neither interest nor profit my readers ; but I have one thing to say concerning it which I wish that I could impress upon every woman in the civilized world.

It is this : *whenever a woman has symptoms of cancer of the womb she should immediately go to a physician and be examined, for the purpose of determining whether she is really suffering from this disease or not.* In such cases it is always best to get the opinion of a specialist.

Many women imagine that they are afflicted with this disease when they are not ; and many who really have cancer of the womb never think of such a thing. The imagination of the former, although unpleasant, does no real mischief, while the indifference of the latter is fraught with the greatest dangers to life since it is an established fact that cancer is usually curable only in the early stages, while in the later stages it has involved so large a space that if all the diseased tissues are removed, death is apt to be the result.

Cancer occurs more frequently in the womb than in any other organ of the body. Usually the lower end of the neck is the part first affected, although it may begin at any part of the organ.

The causes of cancer of the womb are not yet clearly determined, but it is certain that in many cases it is hereditary. Child-bearing predisposes to it, and a laceration

of the neck of the womb, if it does not heal, is believed by many to act as a cause of this disease. This condition is in all probability the most powerful of all the exciting causes of cancer of the womb.

The principal *symptoms* pointing to cancer of the womb are pain, bleeding, and offensive discharges.

The *pain* is usually of a lancinating or shooting character, and generally it is quite severe in the advanced stages of the disease, although in some exceptional cases it is not very pronounced. But in the early stages of the disease (and this is the most important period for both patient and physician) pain is a very unreliable symptom since it is frequently entirely absent or comparatively slight.

The bleeding usually shows itself at first in the form of profuse menstruation, then it comes on between the menstrual periods. Sometimes it comes on especially after sexual intercourse.

Offensive discharges constitute the most characteristic of all the local signs. They are rarely if ever absent in this disease. Not every woman, however, who has an offensive discharge is afflicted with cancer, since in other diseases of the womb we sometimes find the discharges more or less offensive, but not near so pronounced as in cancer.

When the disease is once fully established we have also constitutional symptoms. Usually there is marked anæmia and a peculiar ashy color of the skin. There are many cases, too, without this condition of the skin. Dyspepsia is also very frequently present.

The *treatment* of this disease is, of course, surgical. Removal of the diseased parts is the only remedy that is of any benefit.

This is accomplished by means of a strong wire fastened to an instrument called the “*écraseur*,” and then applied around the lower end of the womb, which projects into the vagina, — the place where cancer most frequently occurs. On turning a screw at the instrument the wire cuts off the

diseased part of the uterus. It will thus be seen that the knife, of which most people have such a dread, is not used at all in performing this operation.

This should, as I said before, always be done *early*, and I repeat what I said at the beginning of this chapter, that every woman who has symptoms of cancer should consult a physician without delay.

For the offensive discharges accompanying this disease there is nothing so useful as permanganate of potassium: Dissolve from one-fourth to one-half of a teaspoonful of this in a pint of tepid or cool water and inject this amount two or three times daily. It is well to wear a napkin after using this injection, as otherwise the linen would become stained.

CHAPTER XV.

STERILITY (*Barrenness*).

A MARRIED woman, whose general health is good and whose reproductive organs are normal, will, within a variable period after marriage, conceive. If she does not conceive she is said to be sterile — barren.

Conception can, of course, take place only during the period of sexual activity, that is, the time between puberty and the “change of life.” During suckling, also, the majority of women do not menstruate, and, consequently, cannot conceive.

Barrenness is not a very uncommon condition. Its causes consist principally of deformities and diseases of the womb.

One of the most common conditions found in cases of sterility is an imperfectly developed womb, which is sharply bent forwards upon itself (anteflexed), and has an unusually small mouth. Here it seems that the cause is a mechanical one — the small size of the mouth of the womb and the flexion. Such a condition of things is certainly not favorable to the passage of impregnating elements into the womb.

Retroflexion of the womb has a similar effect, but it is not so frequently found as a cause of this condition.

Inflammation of the womb, especially of its neck, is apt to cause sterility, either from the mouth of the womb being blocked up by tenacious mucus or from the formation of acid discharges, which destroy the vitality of the elements necessary for impregnation. These can live only in an

alkaline or neutral medium, the former being the condition of the secretions of the healthy womb. A profuse leucorrhœal discharge produced by the vagina may have a similar effect. Profuse menstruation also acts as a cause of sterility.

To recapitulate then, sterility is usually due to some disease of the womb, and whenever a woman who is desirous of having offspring finds herself sterile, she should consult a physician as to the cause of this condition in her particular case, and if there are prospects of a cure, undergo systematic treatment. It must be remembered that sterility is often due to disorders which are perfectly curable. Hence a woman who is sterile need not despair.

It must not be forgotten that sometimes, though very seldom, the fault lies with the husband.

CHAPTER XVI.

THE CHANGE OF LIFE.

AT the age of about forty-five or forty-eight years a woman ceases to menstruate. To the various changes occurring at this time the very appropriate term, "change of life" has been applied. It is also sometimes called the "critical period," and such it certainly is. One of the most decided changes noticable at this period, is, of course, the cessation of menstruation; but this is in reality merely a result of certain changes occurring in the reproductive organs.

At about the age of forty-five years the period allotted to woman for child-bearing is at an end, and, consequently, the organs concerned in reproduction, having completed their work, atrophy. Menstruation, being merely a result of the physiological activity of these organs, must, therefore, cease.

The womb, ovaries, and vagina all undergo a process of involution somewhat similar to the changes occurring in the womb after labor; they receive less blood, and, as a result, they waste, or, as medical writers usually say, atrophy. As a result of this, ovulation, and, therefore, menstruation, and child-bearing are impossible. In quite old age this atrophy of the reproductive organs is sometimes very marked. The ovaries occasionally waste until they are no larger than a bean; the part of the womb which projects into the upper end of the vagina frequently becomes entirely absorbed, and the vagina may contract so much that a pessary which was introduced with ease a few years previous is now removed with great difficulty.

Let us now for a moment look at the changes which the general system undergoes just before and after the final cessation of menstruation. The most noticeable feature of a woman at this period is that she becomes fat. This deposit of adipose tissue occurs especially in the abdomen, which sometimes becomes so prominent that coupling this with the absence of menstruation, pregnancy is occasionally suspected. In the face and breasts, and also in other parts of the body, there is likewise a deposit of fat, though not so marked as in the abdomen. A miniature mustache not seldom appears on the upper lip; and the increased deposit of fat in the face and neck frequently produces a double chin. The stomach and bowels do not perform their functions properly, the appetite becomes capricious, and headache and various mental disturbances are common.

There are many similarities between puberty, the beginning of sexual activity, and the "change of life," the close of sexual activity. They are both critical periods in a woman's life; both predispose to, and often are accompanied by, disease; and the disorders arising at the two periods are very similar indeed.

The change of life may occur unusually early or late. In either case constitutional peculiarities which are hereditary may be the cause. Indeed, the female members of a family usually have the change of life at very nearly the same age, whether that be early or late. Not seldom, too, we find that diseases of the pelvic organs cause the change of life to come on earlier or later than usual. Thus fibroid tumors of the womb, or chronic inflammation of this organ, — but especially the former, — frequently delay the change, owing to the congestion of the pelvic organs existing in these cases.

The change of life varies very greatly in different women. In some it is not accompanied by any untoward consequences whatever. This is, however, not usually the case.

Before the final cessation of menstruation it is usually irregular, both as regards time and quantity, for a period of from two or three months to several years. During this period menstruation may, at times, occur every two weeks, or only once in two or three months.

In other cases, again, we find very violent flooding coming on without any apparent cause, and sometimes threatening life. These, of course, require active treatment.

In other cases menstruation gradually diminishes in amount for several years, until finally it ceases at the change of life, without any irregularities, floodings, or other unpleasant symptoms.

During the greater part of the thirty years of sexual activity a woman loses from four to six ounces of blood every month. The system is now so thoroughly accustomed to this drain that to stop it suddenly, without any vicarious channel for the exit of this blood, as the nourishment of the child in pregnancy, or the formation of milk during lactation, we would naturally suppose would be followed by untoward consequences. This we find in reality to be the case, even though the cessation of menstruation at the change of life is a perfectly physiological one.

Some women, as said before, have no trouble at all at this period, but the great majority suffer more or less disturbance, the degree of suffering depending, as we shall see later on, upon a variety of circumstances.

Let us now consider the more important of the various disorders which are produced by the change of life.

First in importance stands *flooding*. This may come on at a menstrual period or between the periods. Sometimes it comes on but once, and then it usually occurs at the last menstrual period; in other cases it is repeated. Hemorrhages may occur at this period and still not be due to the change of life. They may be caused by inflammatory conditions of the womb, or by fibroid tumors, cancers, etc., existing at this time. I might just here mention the fact

that cancer of the womb is very apt to occur at about this period. We cannot say that the change of life acts as a cause, but the disease certainly occurs at this time with very great frequency.

When menstruation ceases, increased work is thrown on the various excretory organs of the body, notably the kidneys, liver, skin, and lungs. The kidneys secrete more waste products than usual, and frequently we find a deposit of phosphates or urates in the urine. Gravel not seldom occurs, and gives rise to considerable disturbance of the urinary organs.

The skin seems to be considerably disturbed at the change of life. Unnatural sweats, sometimes very profuse, occur quite frequently. In this manner the skin eliminates waste products. These sweats usually occur during the daytime but often they are also very marked during the night, producing great annoyance. Those suffering much from sweats are very prone to attacks of colds especially when they occur during the night. Sometimes we find local sweats occurring on the palms of the hands, or the soles of the feet, or on the chest, etc.

Another very unpleasant symptom of the change of life, and one which is hardly ever absent, is a peculiar sensation of heat, occurring particularly on the neck, face, and chest. This is ordinarily termed the "flushes." When these attacks come on a woman usually runs for the fan, if in summer time, while in the winter the doors and windows will be opened very suddenly, regardless of the comfort of others present, who may have somewhat less caloric. These attacks may last for a considerable time, but are ordinarily over in a few minutes. They are often accompanied by vertigo and considerable weakness, and may be preceded by chilly sensations, or followed by sweats. These flushes are frequently brought on by excitement, warm rooms, etc.

Various skin eruptions are apt to occur at this period, particularly eczema (tetter). The stomach and liver are

frequently disturbed. The appetite is often capricious and the bowels costive, but quite frequently there is diarrhœa. In very many cases there is a "feeling of goneness" in the pit of the stomach. Sometimes there is vicarious bleeding from the nose or the mouth, and sometimes also from the bowels. Hemorrhoids (piles) are quite common at this period.

We also find various nervous troubles directly due to the change of life. Neuralgia in various parts of the body, especially in the back, head, and chest, is extremely common. Headache occurs quite frequently. Hysteria, which is so common at the age of puberty, also occurs quite frequently at the time of the cessation of menstruation. Sometimes, too, we have general convulsions, and epilepsy, which may have remained dormant for many years.

Various mental disturbances occur. The temper frequently becomes quite irritable, and there is a state of indecision and inability to fix the mind for any length of time. Sometimes, again, a woman becomes very suspicious about matters which she would otherwise never think of. At other times she becomes quite melancholy, broods over trifles, and makes herself much unnecessary trouble. All this is not very uncommon, but once in a while there is much more mental disturbance really constituting *insanity* for the time being. These cases are usually curative in a short time, but sometimes confirmed insanity results.

I have now described the various disorders incident to the change of life, and the reader will naturally ask, "In what cases must we expect untoward symptoms and diseases?" To this I would say, that disease of the uterus existing before the change comes on seems to be the principal cause of trouble; that those who have had a difficult beginning of menstruation (puberty) are very likely to have a troublesome end; and that whatever disturbs the general health, depresses the nervous system, and produces a sluggish condition of the excretory organs, gives rise to trouble at the change of life.

Another question presents itself right here. What influence will the change of life have in a case of chronic congestion and inflammation of the womb? During and for a short time after the change of life, they are worse, owing to the sudden cessation of menstruation, producing congestion of the pelvic organs. But after the system is accustomed to this new life disease of the womb usually gets much better, since the periodical congestions of menstruation which before retarded a cure, are now absent.

THE HYGIENE OF THE CHANGE OF LIFE.

In order to pass over this critical period with as little discomfort as possible it is highly important to pay strict attention to certain laws of hygiene, which I shall briefly describe.

It must be remembered that formerly the system was accustomed to the periodical discharges of menstruation, and that it now attempts to maintain its equilibrium, so to speak, by increasing the action of some of the excretory organs, as the kidneys, liver, lungs, and skin. If this goes on well, and is not overdone, there is usually very little trouble.

We can easily comprehend, then, why the diet should be restricted. To indulge in excessive eating at this period is one of the worst things that can be done, since it will only increase the existing tendency to plethora, and congestion of various organs, and throw more work on the kidneys, liver, skin, etc. The diet, then, should by all means be sparing, and consist largely of vegetables. Meat should be eaten in very moderate amounts, and better but once daily. All indigestible articles of food and spices should be avoided.

There is frequently at this period a strong craving for alcoholic stimulants, which sometimes leads to intemperance. As a rule, it is best to avoid them entirely, as they usually do more harm than good, even when used in moderation.

Muscular exercise is very important at the change of life. No form of exercise is more beneficial than walking, or the ordinary work of the kitchen. Exercise does just what is wanted, — it increases the action of the kidneys, skin, and lungs, and thus relieves congestion of internal organs. It also has a tranquillizing influence on the nervous system, and in a great measure prevents the various forms of nervousness.

The skin, too, must receive attention ; it must be kept in action as much as possible. Nature does this in a great measure, as is shown by the frequent attacks of unusual sweating which come on at this period.

Warm baths, frequently repeated and followed by prolonged frictions with a coarse towel or flesh-brush, are quite useful in keeping up the action of the skin.

Exposure to cold and wet has a bad influence on the functions of the skin, and it is for this reason that those whose occupations or place of living expose them to these conditions are so apt to suffer at the change of life.

Those who suffer from night-sweats should wear flannel over the night-dress, in order to avoid catching cold. During the day I would advise all to wear flannel, whether subject to attacks of unnatural sweating or not, since it keeps the skin acting well, and protects it against the vicissitudes of the atmosphere. As flannel frequently irritates the skin, producing an itching sensation, which is very annoying, it is always best to wear it over the chemise, and thus avoid this unpleasant feature.

This may seem to many a very trifling matter to mention, but it is, after all, not such a trifling matter from a practical stand-point. Many patients on being advised to wear flannel, continually say, “Why, doctor, I can’t wear flannel. I can’t bear it; it produces an awful itching of my skin.” Dr. Emmet, a very prominent specialist and author, of New York, says: “Success in the treatment of the diseases of women lies wholly in attention to minute

details." The more I treat female diseases the more I become convinced of the truthfulness of this remark.

The reproductive organs should rest at this period. But, just here, quite an important point comes up. We frequently see marriages contracted at about this period, especially in the case of widows. Is this advisable? Certainly not. Unless the sexual relations are almost entirely avoided such a union is very apt to cause disease.

The nervous system must be guarded more at the change of life than at other times. Excitement and worry must be avoided. Strong emotions may bring on flooding, or disturb the nervous system. A sufficient amount of sleep should always be taken. In order to have good, refreshing sleep, the bedroom should be cool. Feather beds are injurious. Late suppers give rise to disagreeable dreams and disturb the sleep. In cases of sleeplessness a warm bath before retiring is sometimes useful.

The medical treatment of the diseases occurring at the change of life. — If the sweats, which occur at this period, are profuse, and, consequently, debilitating, it is well to check them somewhat. For this purpose a perfectly safe and usually quite effective remedy is aromatic sulphuric acid. Take thirty drops in half a wineglassful of sweetened water, after each meal.

For nervousness there is no remedy more effective than bromide of sodium. Put four drachms of this in a two-ounce vial and fill it up with pure water. Of this take two teaspoonfuls in a wineglassful of sweetened water; or, what is better, a glass of fresh cow's milk, quite cold. Repeat this three or four times daily, always taking it after meals. This will also be found a good remedy for sleeplessness, when taken on retiring.

For the treatment of flooding I refer the reader to the chapter on menorrhagia.

In speaking of the use of medicines at this period we must not forget *purgatives*, for they are more useful at the

change of life than any other class of remedies. They are particularly useful in plethoric women. There are, however, few women who do not find much relief from the use of an occasional purgative at the change of life. The saline purgatives are much better than pills. Epsom salt is quite efficient, but very unpalatable. I usually advise the use of solution of citrate of magnesia, the contents of one bottle to be taken at a dose, and repeated as often as the case may require, — ordinarily about once every week, for a period of several months.

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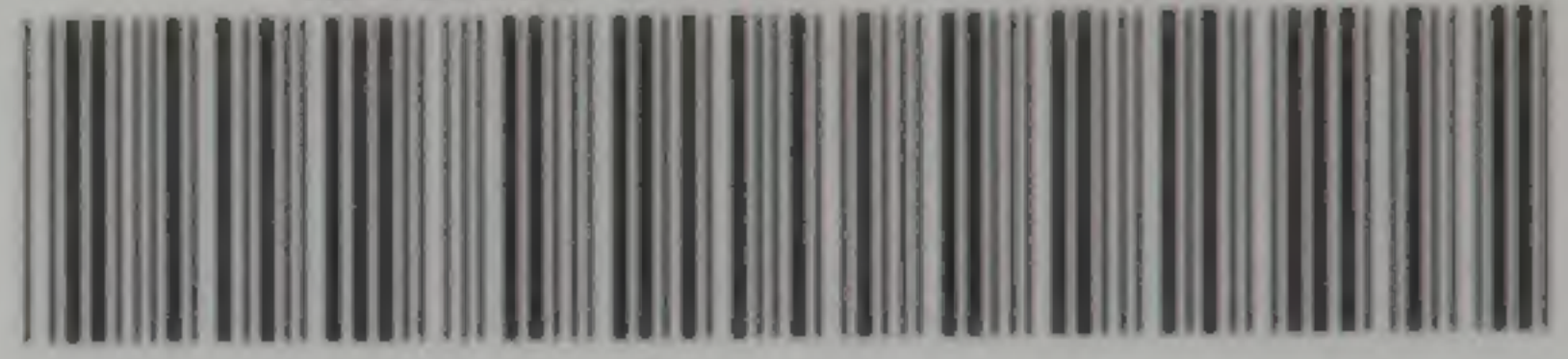
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